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MEDICAL SCHOOL
(688 BOYLSTON STREET, BOSTON, MASS.)

OF
HARVARD UNIVERSITY

FOR
1904-05

FIRST EDITION



CAMBRIDGE
Published by the University
1904

1904.							1905.													
JULY.							JANUARY.							JULY.						
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CONTENTS.

	PAGE
CALENDAR	2
MEDICAL SCHOOL CALENDAR	5
FACULTY OF MEDICINE	7
STANDING COMMITTEES FOR THE MEDICAL SCHOOL	8
GENERAL STATEMENT	9
ADMINISTRATIVE BOARD OF THE MEDICAL SCHOOL	10
STANDING COMMITTEES OF THE ADMINISTRATIVE BOARD	11
INSTRUCTORS, LECTURERS, AND ASSISTANTS	11
AUSTIN TEACHING FELLOWS	14
ADMISSION OF STUDENTS	15
DIVISION OF STUDENTS	16
TABLE OF DIVISION OF STUDIES	17
METHODS OF INSTRUCTION	18
Anatomy	18
Histology and Embryology	20
Physiology	22
Physiological and Pathological Chemistry	25
Bacteriology	27
Pathology	28
Comparative Pathology	29
Materia Medica and Therapeutics	30
Theory and Practice of Physic	31
Clinical Medicine	32
Pediatrics	34
Clinical Microscopy	36
Surgery	37
Obstetrics and Gynaecology	42
Dermatology and Syphilis	44
Neurology	45
Psychiatry	46
Ophthalmology	46
Otology	47
Laryngology and Rhinology	48
Legal Medicine	49
Hygiene	49
Municipal Sanitation	49

	PAGE
EXAMINATIONS	50
DEGREES	52
FEES AND EXPENSES	53
CLINICAL ADVANTAGES	54
WARREN MUSEUM	56
LIBRARIES	57
FELLOWSHIPS AND SCHOLARSHIPS	57
PRIZES	60
COURSES OF STUDY FOR GRADUATES	62
SUMMER COURSES OF INSTRUCTION	63
LIST OF GRADUATE COURSES	64
LIST OF SUMMER COURSES	68
TABULAR VIEW OF UNDERGRADUATE COURSES	74
DEGREES CONFERRED IN 1904	96
ADMISSION EXAMINATION PAPER IN CHEMISTRY	99
ANNUAL EXAMINATION PAPERS	100

MEDICAL SCHOOL CALENDAR.

1904.

- Sept. 22, Thursday.* Examinations begin for applicants for advanced standing, and for men previously conditioned.
- Sept. 28, Wednesday.* Examination in Chemistry for admission.
- Sept. 29, Thursday.* **Academic Year begins.** Registration of Students.
- Oct. 1, Saturday.* Last day for receiving applications for the Bullard Fellowships.
- Nov. 1, Tuesday.* Last day for receiving essays for the William H. Thorndike Prize.
- Nov. 24, Thursday.* Thanksgiving Day : a holiday.
- Nov. 30, Wednesday.* Last day for receiving applications for the Cheever and Hayden Scholarships.

RECESS FROM DEC. 23, 1904, TO JAN. 2, 1905, INCLUSIVE.

1905.

- Jan. 2, Monday.* Last day for receiving dissertations for the Boylston Medical Prizes.
- Jan. 14, Saturday.* Last day for receiving applications from students in the Professional Schools to be qualified for the degree of A.M. in 1905.
- Jan. 30, Monday.* Mid-year Examinations begin.
- Feb. 1, Wednesday.* **Second half-year begins.**
- Feb. 22, Wednesday.* Washington's Birthday : a holiday.
- April 1, Saturday.* Last day for receiving dissertations for the Bowdoin Prizes.

RECESS FROM APRIL 16 TO APRIL 22, INCLUSIVE.

- May 1, Monday.* Last day for receiving dissertations for the Dante, Toppan, and Sumner Prizes.

- May 1, Monday.* Last day for receiving applications of candidates for the degree of M.D. in 1905.
- May 30, Tuesday.* Memorial Day : a holiday.
- June 1, Thursday.* Last day for receiving applications for Scholarships for 1905-06 (except the Cheever and Hayden Scholarships).
- June 1, Thursday.* Examinations begin.
- June 28, Wednesday.* Commencement.
- June 29, Thursday.* Examination in Chemistry for admission.

SUMMER VACATION OF THIRTEEN WEEKS, FROM COMMENCEMENT TO
SEPTEMBER 27, INCLUSIVE.

- Sept. 21, Thursday.* Examinations begin for applicants for advanced standing, and for men previously conditioned.
- Sept. 27, Wednesday.* Examination in Chemistry for admission.
- Sept. 28, Thursday.* **Academic Year begins.** Registration of Students.
- Oct. 2, Monday.* Last day for receiving applications for the Bullard Fellowships.
- Nov. 1, Wednesday.* Last day for receiving essays for the William H. Thorndike Prize.
- Nov. 30, Thursday.* Last day for receiving applications for the Cheever and Hayden Scholarships.

THE MEDICAL SCHOOL.

FACULTY OF MEDICINE.*

CHARLES W. ELIOT, A.M., LL.D., PRESIDENT.

WILLIAM L. RICHARDSON, M.D., DEAN, and *Professor of Obstetrics.*

HENRY P. BOWDITCH, M.D., LL.D., D.Sc., *George Higginson Professor of Physiology.*

CLARENCE J. BLAKE, M.D., *Professor of Otology.*

J. COLLINS WARREN, M.D., LL.D., HON. F.R.C.S., *Moseley Professor of Surgery.*

REGINALD H. FITZ, M.D., *Hersey Professor of the Theory and Practice of Physic.*

THOMAS DWIGHT, M.D., LL.D., *Parkman Professor of Anatomy.*

JOHN H. MCCOLLOM, M.D., *Assistant Professor of Contagious Diseases.*

JAMES J. PUTNAM, M.D., *Professor of Diseases of the Nervous System.*

EDWARD S. WOOD, M.D., *Professor of Chemistry.*

FREDERICK C. SHATTUCK, M.D., *Jackson Professor of Clinical Medicine.*

EDWARD H. BRADFORD, M.D., *Professor of Orthopedic Surgery.*

CHARLES A. BRACKETT, D.M.D., *Professor of Dental Pathology.*

FRANCIS H. DAVENPORT, M.D., *Assistant Professor of Gynaecology.*

THOMAS MORGAN ROTCH, M.D., *Professor of Pediatrics.*

EUGENE H. SMITH, D.M.D., *Professor of Mechanical Dentistry and Orthodontia, and Dean of the Dental School.*

WILLIAM F. WHITNEY, M.D., *Curator of the Anatomical Museum.*

CHARLES S. MINOT, S.D., LL.D., Sc.D., *Professor of Histology and Human Embryology.*

MAURICE H. RICHARDSON, M.D., *Professor of Clinical Surgery.*

CHARLES M. GREEN, M.D., *Associate Professor of Obstetrics and Clinical Gynaecology, and Secretary of the Faculty of Medicine.*

* Arranged here and elsewhere in the Catalogue, with the exception of the President and Dean, on the basis of collegiate seniority.

EDWARD C. BRIGGS, M.D., D.M.D., *Professor of Dental Materia Medica and Therapeutics.*

WILLIAM T. COUNCILMAN, M.D., *Shattuck Professor of Pathological Anatomy.*

HERBERT L. BURRELL, M.D., *Professor of Clinical Surgery.*

MYLES STANDISH, M.D., *Assistant Professor of Ophthalmology.*

HAROLD C. ERNST, M.D., *Professor of Bacteriology.*

CHARLES HARRINGTON, M.D., *Assistant Professor of Hygiene.*

WILLIAM H. POTTER, D.M.D., *Professor of Operative Dentistry.*

JOHN T. BOWEN, M.D., *Assistant Professor of Dermatology.*

GEORGE G. SEARS, M.D., *Assistant Professor of Clinical Medicine.*

FRANZ PFAFF, M.D., *Assistant Professor of Pharmacology and Therapeutics.*

THEOBALD SMITH, M.D., *George Fabyan Professor of Comparative Pathology.*

WILLIAM T. PORTER, M.D., *Associate Professor of Physiology.*

FRANK B. MALLORY, M.D., *Associate Professor of Pathology.*

EDWARD H. NICHOLS, M.D., *Assistant Professor of Surgical Pathology.*

WALTER B. CANNON, M.D., *Assistant Professor of Physiology.*

JOHN WARREN, M.D., *Demonstrator of Anatomy.*

STANDING COMMITTEES FOR THE MEDICAL SCHOOL.

Course of Study. — Dr. Fitz (*Chairman*), and Drs. Bowditch, W. L. Richardson, Dwight, Shattuck, Bradford, and Mallory.

Nominations. — Dr. Burrell (*Chairman*), and Drs. Whitney, Ernst, Harrington, and Bowen.

Graduate Courses. — Dr. Bradford (*Chairman*), and Drs. McCollom, Burrell, T. Smith, and Cannon.

Summer Courses. — Dr. _____ (*Chairman*), and Drs. Putnam and Green.

Admission. — Dr. W. L. Richardson (*Chairman*), and Drs. Green and Mallory.

Students' Health. — Dr. Ernst (*Chairman*), and Drs. Putnam, E. H. Smith, J. B. Blake, and Badger.

THE MEDICAL SCHOOL.

BOSTON.

GENERAL STATEMENT.

Three professorships of Medicine were established at the University in the years 1782 and 1783. The first degrees in Medicine were conferred in 1788. Before 1811, the degree conferred upon graduates of the School was that of BACHELOR OF MEDICINE; beginning with 1811, the degree has been DOCTOR OF MEDICINE. In 1810, the lectures given in Medicine were transferred from Cambridge to Boston, where the first MEDICAL COLLEGE was built in 1815.

The course of study required in this School for the degree of M.D. is of four years' duration. This requirement was established at the beginning of the year 1892-93.

The academic year begins on the Thursday following the last Wednesday in September, and ends on the last Wednesday in June. In order that the time of study shall count as a full year, students of all classes must present themselves on the first day of the school year and register their names with the Secretary.

There is a Christmas recess from December 23 to January 2 inclusive, and a recess of one week's duration in April.

Beginning with the year 1899-1900 a new arrangement of the subjects taught in the first two years was adopted. During the first half of the first year the students devote their time solely to Anatomy and Histology, and during the second half of the first year to Physiology and Physiological and Pathological Chemistry. They devote the first half of the second year to Pathology and Bacteriology, and the remainder of the second year to a variety of subjects which more particularly prepare the student for the clinical work of the third and fourth years.

Experience has shown that this logical arrangement of the subjects of the first two years enables a student to concentrate his energies to a much greater advantage than he can when his attention is divided among several subjects. Each correlated group presents sufficient variety to avoid monotony. Another advantage of this method is that it greatly increases the amount of time which can be devoted to each subject.

In 1902 certain other changes in the curriculum were adopted, to take effect with the class entering in the autumn of that year. The new course

of study is so arranged that the first three years are devoted to prescribed work, and the fourth year entirely to elective courses. A minimum of one thousand hours' work will be required of each fourth year student; and courses will be offered adapted to the student who wishes to fit himself to be a general practitioner, and also suitable courses for those who intend to become specialists or teachers in any department of medicine. A committee of the Faculty will advise students in regard to their selection of courses. The new elective curriculum of the fourth year will begin in the autumn of 1905.

A series of written, oral, and practical examinations on all the required subjects of medical instruction are distributed throughout the four years' course of study. Every candidate for the degree of Doctor of Medicine must pass these examinations in a satisfactory manner, and also fulfil all the other requirements enumerated on page 51.

The degree of Doctor of Medicine *cum laude* is given to candidates who obtain an average of 80 per cent or over in all the required examinations.

Besides the required and elective courses in the regular system of instruction, there have been established a number of optional lecture and laboratory courses which prepare for, or supplement, many of the required subjects.

Pamphlets descriptive of the many Courses of Study for Graduates, and of the Summer Courses, may be obtained on application.

Inquiries may be addressed to the Dean of the Harvard Medical School, 688 Boylston Street, Boston, Mass.

ADMINISTRATIVE BOARD.

WILLIAM L. RICHARDSON, M.D., DEAN, and *Professor of Obstetrics*.
J. COLLINS WARREN, M.D., LL.D., Hon. F.R.C.S., *Professor of Surgery*.

EDWARD S. WOOD, M.D., *Professor of Chemistry*.

FREDERICK C. SHATTUCK, M.D., *Professor of Clinical Medicine*.

WILLIAM F. WHITNEY, M.D., *Curator of the Anatomical Museum*.

CHARLES M. GREEN, M.D., SECRETARY, and *Associate Professor of Obstetrics and Clinical Gynaecology*.

CHARLES HARRINGTON, M.D., *Assistant Professor of Hygiene*.

FRANK B. MALLORY, M.D., *Associate Professor of Pathology*.

WALTER B. CANNON, M.D., *Assistant Professor of Physiology*.

OFFICE HOURS OF THE DEAN, TUESDAY AND FRIDAY, 12.15 TO 1 P.M.;
OF THE SECRETARY, MONDAY AND THURSDAY, 12 TO 1 P.M.

STANDING COMMITTEES.

Building. — Dr. Wood (*Chairman*), and Drs. W. L. Richardson and Whitney.

Advertising and Catalogue. — Dr. Wood (*Chairman*), and Drs. Green and Mallory.

Library. — Dr. Shattuck (*Chairman*), and Drs. Harrington and Cannon.

Warren Museum. — Dr. Warren (*Chairman*), and Drs. Whitney and Mallory.

Fellowships. — Dr. Shattuck (*Chairman*), and Drs. Warren, Whitney, Harrington, and Mallory.

Scholarships and Students' Aid. — Dr. W. L. Richardson (*Chairman*), and Drs. Green and Cannon.

INSTRUCTORS, LECTURERS, AND ASSISTANTS.*

EDWARD COWLES, M.D., LL.D., *Clinical Instructor in Mental Diseases.*

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FRANCIS B. HARRINGTON, M.D., *Lecturer on Surgery.*

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HENRY JACKSON, M.D., *Instructor in Clinical Medicine.*

ALGERNON COOLIDGE, JR., M.D., *Clinical Instructor in Laryngology.*

ROBERT W. LOVETT, M.D., *Assistant in Orthopedics.*

* Arranged here and elsewhere in the Catalogue on the basis of collegiate seniority.

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JOEL E. GOLDTHWAIT, M.D., *Assistant in Orthopedics.*

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GEORGE A. WATERMAN, M.D., *Assistant in Neurology.*
CARL L. ALSBERG, M.D., *Assistant in Physiological Chemistry.*
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SAMUEL ROBINSON, M.D., *Assistant in Anatomy.*

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LANGDON FROTHINGHAM, M.D.V., *in Bacteriology.*
EWING TAYLOR, M.D., *in Histology and Embryology.*
FRANK L. RICHARDSON, M.D., *in Surgery.*
HERBERT R. BROWN, B.S., *in Comparative Pathology.*

THE MEDICAL SCHOOL.

ADMISSION OF STUDENTS.

Candidates for admission to this School must present a degree in Arts, Literature, Philosophy, or Science from a recognized college or scientific school, with the exception of such persons, of suitable age and attainments, as may be admitted by a special vote of the Administrative Board in each case.*

All candidates, whether presenting a degree or not, are required to satisfy the Faculty that they have had a course in Theoretical and Descriptive (Inorganic) Chemistry and Qualitative Analysis sufficient to fit them to pursue the courses in Chemistry given at the Medical School;† or, failing in this, to pass an examination in General Chemistry and Qualitative Analysis. Students who are unable to fulfil either of these requirements may enter conditioned in Chemistry; but no student will be permitted to take part in any exercise of the third class, or to present himself for examination in the subjects of that class, until deficiencies in General Chemistry and Qualitative Analysis have been made up.

The admission examination in General Chemistry (at which time also the note-books in Qualitative Analysis must be handed in) is held at the Medical School, 688 Boylston St., Boston, at 12 o'clock noon on the Thursday following the last Wednesday in June, and on the last Wednesday in September. The examination is conducted in writing. Specimen examination papers may be found in the Medical School Catalogues.

In and after September, 1907, a knowledge of elementary organic chemistry will be required for admission.

Applicants for admission to the Medical School who have studied three years in recognized colleges, technical, or scientific schools, in which courses in Human Anatomy, Physiology, Histology, and Physiological

* The exception above referred to applies only to men who have practically finished a required course for a degree, but for some good and sufficient reason, such, for instance, as wishing to graduate with their class, prefer waiting until a later period for graduation; or to men who, without such a degree, have acquired an equivalent education and training sufficient to enable them to profit by the instruction offered in the School.

† The Summer Course in General Chemistry and Qualitative Analysis given at the Medical School is adapted to students about to enter the Medical School.

Chemistry* are a part of the instruction, may be admitted to advanced standing, provided they pass an examination in these subjects and possess the other requirements for admission.

A graduate of another medical school of recognized standing may obtain the degree of M.D. at this University, after a year's study in the undergraduate course, by passing all examinations required in the full undergraduate course and by fulfilling all requirements for admission. These examinations may be taken only at the times set for the regular examinations in September, February (mid-year examinations), and June. The next year will begin September 29, 1904.

DIVISION OF STUDENTS.

Students are divided into four classes according to their time of study and proficiency. No student may advance with his class, or be admitted to advanced standing, until he has passed the required examinations in the studies of the previous year, or a majority of them; nor may he become a member of the third class, until he has passed all the examinations of the first, including the admission examinations in Chemistry, and in addition a majority of those of the second year; nor of the fourth class, until he has passed all the examinations of the first and second years, in addition to a majority of those of the third year.

No student will be permitted to continue his membership in the School, if at the beginning of his second year he has passed none of the first-year examinations.

In order that the time of study shall count as a full year, students of all classes must register on Thursday, the first day of the academic year.

Beginning with the academic year 1906-07 students of the third and fourth years will be required to devote themselves exclusively to the work of the School.†

Students who began their professional studies in other recognized Medical Schools may be admitted to advanced standing; but all persons who apply for admission to the advanced classes must furnish a satisfactory certificate of time spent in medical studies, and must pass examinations in the branches already pursued by the class to which they seek admission, and fulfil all other requirements for admission.

Any student may obtain a certificate of his period of connection with the School.

* The course as now given to the first-year class comprises both physiological and pathological chemistry. Men applying for advanced standing who pass in physiological chemistry but not in pathological chemistry will be admitted with a condition in pathological chemistry and given an opportunity to make up the condition either by work in that subject during the latter part of the second half-year or by taking a summer course, and passing a satisfactory examination.

† The intent of this rule is that third and fourth year students may not engage in hospital work during term time, except in so far as required by the School curriculum.

DIVISION OF STUDIES.

FOR THE FIRST YEAR.	FOR THE SECOND YEAR.	FOR THE THIRD YEAR.	FOR THE FOURTH YEAR.	ELECTIVES.
*Anatomy. 3	*Bacteriology. 1	*Materia Medica and Therapeutics. 2	Clinical Medicine. 3	Anatomy. 2
*Histology and Embryology. 3	*Pathology. 3	*Theory and Practice. 3	Clinical Surgery. 3	Advanced Histology. 2
Physiology. 3	Hygiene. 1	Clinical Medicine. 3	*Orthopedics. 1	Histology of the Nervous System. 2
Physiological and Pathological Chemistry. 3	†Materia Medica and Therapeutics. 3	Pediatrics. 2	*Syphilis. 1	Embryology. 2
	Theory and Practice. 3	*Surgery (written 2 hrs., practical 1 hr.) 3	*Ophthalmology. 1	Physiology. 2
	Clinical Medicine. 3	Clinical Surgery (written 1 hr., practical 1 hr.) 2	*Otology. 1	Physiological Chemistry. 2
	Surgery. 3	Obstetrics. 3	*Laryngology. 1	*Clinical Chemistry. 1
		Gynaecology. 1	Hygiene. 1	Bacteriology. 2
		Dermatology. 1	Pediatrics, Contagious Diseases. 1	Comparative Etiology of Infectious Diseases. 1
		Syphilis. 1	Clinical Microscopy. 1	*Clinical Microscopy. 1
		Neurology. 1	Genito-urinary Surgery. 1	Operative Surgery. 1
		Psychiatry. 1	Psychiatry. 2	†Orthopedics. 2
		*Ophthalmology. 1	Municipal Sanitation. 1	*Operative Obstetrics. 1
		Otology. 1		Gynaecology. 2
		Laryngology. 1		Dermatology. 2
		Genito-urinary Surgery. 1		Neurology. 2
				†Ophthalmology. 2
				†Otology. 2
				Hygiene. 2

NOTE:—Subjects in which an examination is required are in roman letters. The number following the name of the examination indicates the length in hours of the examination. In the fourth year, electives must be chosen whose examinations shall aggregate three hours.

* Examination in February. † These electives count as one-hour electives. ‡ Examination in Third Year.

METHODS OF INSTRUCTION.

The following methods of instruction are adopted in the several departments:—

NOTE.—The figures at the right of the page indicate as accurately as can be ascertained the number of hours of instruction which each student receives in the different courses.

ABBREVIATIONS USED IN THE FOLLOWING PAGES, AND IN THE
TABULAR VIEWS.

B.C.H.	= Boston City Hospital.
B.D.	= Boston Dispensary.
B.I.H.	= Boston Insane Hospital (Pierce and Austin Farms).
B.L.H.	= Boston Lying-in Hospital.
Ch.H.	= Children's Hospital.
E and E I.	= Massachusetts Charitable Eye and Ear Infirmary.
H.M.S.	= Harvard Medical School.
I.H.	= Infants' Hospital.
L.I.H.	= Long Island Hospital.
McL.H.	= McLean Hospital.
M.G.H.	= Massachusetts General Hospital.
S.D.B.C.H.	= South Department, Boston City Hospital.
S.H.	= Samaritan Hospital.
S.O.P.D.	= Surgical Out-Patient Department.

Anatomy.

THOMAS DWIGHT, M.D., LL.D., *Parkman Professor of Anatomy.*
 JOHN WARREN, M.D., *Demonstrator of Anatomy.*
 ELISHA FLAGG, M.D., *Assistant in Anatomy.*
 HARRIS P. MOSHER, M.D., *Assistant in Anatomy.*
 CHARLES S. BUTLER, M.D., *Assistant in Anatomy.*
 HENRY O. MARCY, Jr., M.D., *Assistant in Anatomy.*
 LINCOLN DAVIS, M.D., *Instructor in Anatomy.*
 RICHARD G. WADSWORTH, M.D., *Assistant in Anatomy.*
 DAVID CHEEVER, M.D., *Assistant in Anatomy.*
 FRED T. MURPHY, M.D., *Assistant in Anatomy.*
 DAVID D. SCANNELL, M.D., *Assistant in Anatomy.*
 SAMUEL ROBINSON, M.D., *Assistant in Anatomy.*

First year.—The instruction consists of lectures; various practical exercises, including abundant dissection under the direction of the

Demonstrator; recitations; demonstrations; and study of frozen sections and of the living model. The means and methods of illustrating the anatomical lectures probably are unrivalled in this country. The system of demonstrations to small sections has been greatly extended.

Fourth year.—There is an elective course in the dissecting room. The Demonstrator will furnish the details upon application.

Text-books.—Cunningham. Quain. Morris. Gray. Gerrish. Woolsey, Applied Anatomy.

Collateral Reading.—Dwight, Frozen Sections of a Child. Cunningham, Manual of Practical Anatomy. Macalister, Human Anatomy. Testut, Anatomie Humaine. Poirier, Traité d'Anatomie Humaine. Tillaux, Anatomie topographique. Humphry, Human Skeleton.

FIRST YEAR.

October.

Lectures. Professor DWIGHT. <i>Nine hours weekly.</i>	36
Demonstrations and study of bones and joints. <i>Three hours daily.</i>	72

November and December.

Lectures. Professor DWIGHT. <i>Two hours a week in November, three hours a week in December.</i>	20
Demonstrations. Dr. WARREN. <i>Four times a week to each section of the class.</i>	32
Practical anatomy with recitations. <i>Three hours a day, five times a week.</i>	120

January.

Lectures and demonstrations. Professor DWIGHT. <i>Daily.</i>	24
Demonstrations. Dr. WARREN. <i>Four times a week to each section of the class.</i>	16
Demonstrations and study of the brain and organs of sense. <i>Three hours a day, five times a week.</i>	60
Practical anatomy with recitations. <i>Three hours a day, five times a week.</i>	60

FOURTH YEAR.

January, February, and March.

Elective course. Drs. WARREN and DAVIS.	90
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November.

Optional course in the Anatomy of the Genito-urinary System. Dr. WADSWORTH.	14
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Histology and Embryology.

CHARLES S. MINOT, S.D., LL.D., Sc.D., *Professor of Histology and Human Embryology.*

JAMES C. DONOGHUE, M.D., *Assistant in Histology.*

JOHN L. BREMER, M.D., *Instructor in Histology and Embryology.*

FREDERIC T. LEWIS, M.D., *Instructor in Histology and Embryology.*

EWING TAYLOR, M.D., *Austin Teaching Fellow in Histology and Embryology.*

LABORATORY.

The laboratory comprises a general class room with places for ninety men, and four smaller rooms for the officers of instruction, advanced workers, and for the library and collections. There are 225 microscopes for students' use, which are let to students for three dollars a term. There are over 14,000 permanent preparations used in the class work, a histological collection illustrating most of the features of the microscopic structure of the higher animals, and an embryological collection which includes over six hundred embryos of various selected vertebrates cut into serial sections, and thoroughly catalogued. There are also numerous wax and paper models for use in the course of instruction.

The equipment includes numerous microtomes, most of the leading patterns being represented, and many other pieces of apparatus, offering altogether ample facilities for elementary and advanced work and for investigation.

The library consists of complete sets of the most important histological and embryological journals, of the standard text-books, and of a private collection, which is open to investigators, of about four thousand pamphlets. A card catalogue and a classified bibliography are maintained, which give ready access to the literature of histology and embryology.

Text-books.—Stöhr, Manual of Histology. Böhm and von Davidoff, A Text-Book of Histology. Minot, Text-book of Embryology.

Collateral Reading.—Quain, Anatomy. Lee, Microtometist's Vademecum. Kölliker, Gewebelehre. Minot, Human Embryology. Marshall, Vertebrate Embryology.

REGULAR COURSES.

First year.—Histology and Embryology are taught by lectures and laboratory work; twenty-two hours a week are required during October, November, and December. Every student is recommended to purchase

a microscope, but microscopes may be rented, by those who do not possess them, for three dollars a term. Each student is charged a laboratory fee of two dollars.

Fourth year.—Three elective courses are offered, (a) Embryology, (b) Advanced Histology, (c) The Histology of the Nervous System. Each of these courses occupies ten hours a week during the second term.

FIRST YEAR.

October.

Lectures. Professor MINOT. <i>Six times a week.</i>	24
Laboratory work. Drs. DONOGHUE, BREMER, LEWIS, and TAYLOR. <i>Three hours, five times a week.</i>	60

November and December.

Lectures. Professor MINOT. <i>Twice a week.</i>	16
Laboratory work. <i>Four hours, four times a week: three hours, once a week.</i>	152

FOURTH YEAR ELECTIVES.

(a) Embryology. Professor MINOT and Drs. LEWIS and TAYLOR. <i>Ten hours a week, second half-year.</i>	160
(b) Advanced Histology. Professor MINOT and Dr. BREMER. <i>Ten hours a week, second half-year.</i>	160
(c) Histology of the Nervous System. Professor MINOT, and Drs. BREMER and LEWIS. <i>Ten hours a week, second half-year.</i>	160

GRADUATE COURSES.

I. Professor MINOT with Dr. LEWIS will give a course of thirty-two exercises on Elementary Human Embryology for practitioners. This course can be extended by a supplementary course of the same length. Fee, \$25.

Graduates taking these courses will be allowed the privilege of the Histological Laboratory. There will be an additional charge of \$5 for reagents and material.

II. Professor MINOT with Drs. BREMER, LEWIS, and TAYLOR will give a course intended for persons who wish to make a special study of Vertebrate or Human Embryology. This course is open to registered students of the Graduate Department of the Faculty of Arts and Sciences, and will be offered hereafter also as a special course to graduate students of the Medical School.

This course will extend through the entire year, but in two parts of one term each. The resources of the Embryological Laboratory in apparatus

and material render it possible to offer unusually favorable opportunities for both general study and special research. The course is arranged for those who, as morphologists, anatomists, and practitioners, wish to give the principal part of their time for one or more school terms to the subject. It will cover the whole field of Embryology, including the genital products, the theories of heredity and sex, the formation of the germ-layers, differentiation of the organs, the history of the placenta and the general morphology of Vertebrates or of Man. Most of the work will be done by the student in the laboratory, but there will also be formal lectures. Students taking this course will be expected to devote to it not less than eighteen hours a week.

Fee, for one term, \$75. Two terms, \$125.

The above courses I and II will be limited to twelve students in each course.

INVESTIGATION.

Special accommodations are furnished in the laboratory for students who wish to pursue special or advanced work. Special facilities are offered to original investigators, who will receive such personal aid as may be necessary or advantageous.

A special course in vertebrate embryology is given during the second term; this has been accepted by the Faculty of Arts and Sciences, and is open to students of the academic departments.

Physiology.

HENRY P. BOWDITCH, M.D., LL.D., D.Sc., *Professor of Physiology.*

WILLIAM T. PORTER, M.D., *Associate Professor of Physiology.*

WALTER B. CANNON, M.D., *Assistant Professor of Physiology.*

SAMUEL S. MAXWELL, Ph.D., *Instructor in Physiology.*

First Year. — The method of teaching Physiology consists in placing before the student the classical experiments of the science grouped in the most instructive sequence. The student himself performs as many of these as his own skill and the length of the course permit. What he does he is required to do well. The experiments selected are those which best illustrate the several groups or chapters of which physiology is composed. Preference, where possible, is given to observations used in clinical medicine. The observations which he cannot himself make the student reads with an understanding grounded on his own practical experience. The facts thus gained are discussed in conferences, written tests, formal lectures, and recitations.

In the laboratory the student works one hundred and sixty-eight hours. Each student is required to preserve the graphic records obtained in his

experiments together with a brief account of his own observations. The character of the laboratory instruction may be seen from the examination questions, page 99.

The conferences, fifty-five half-hour exercises, are devoted to questions and explanations concerning the experimental work; they are, in fact, a combination of recitation and lecture.

The written tests are twenty-minute examinations held daily and one-hour examinations held weekly during fifteen weeks. The following are some of the questions: State experiments to show where stimulation begins on closure of the galvanic current. What is the reaction of degeneration? Mark on the intra-ventricular pressure curve the moment of opening and closure of the mitral and aortic valves. Give a brief account of the digestion of fat. Give evidence to show that afferent impulses are transmitted by the posterior roots of spinal nerves. Prove the existence of "hot and cold spots" on the skin. Cite experiments to show that the crystalline lens changes its shape in accommodation.

Formal lectures are held five times a week from the sixth to the fifteenth week inclusive.

One recitation is given weekly during fifteen weeks.

Special demonstrations are given every Saturday during fifteen weeks; the motor areas of the cortex of the brain, and the action of the chorda tympani nerve on the secretion of saliva are examples of the subjects chosen for demonstration.

Each student is required to write a physiological thesis the material for which must be taken directly from the report of the original investigations. In addition each student is required to prepare at least one investigation not included in those used for his thesis. About forty-five of the theses are selected for discussion by the class and staff. The subjects chosen are as a rule such as will supplement the instruction given in other ways. The discussions are held five times a week from the sixth to the fifteenth week inclusive. The discussion is opened by three students, each of whom has prepared himself upon some of the original investigations included in the theses, and is continued by the members of the class and of the staff. Among the theses discussed in the last collegiate year were: The excretion of urea; Internal secretion of the pancreas; Oedema; Regeneration of blood after hemorrhage; Artificial parthenogenesis; and Aphasia.

Fourth year. — An elective laboratory course in Physiological Research is offered.

Text-books. — Text-book of Physiology, edited by E. A. Schäfer. Foster, Text-book of Physiology. American Text-book of Physiology. Waller, Human Physiology. Hermann, Lehrbuch der Physiologie. Porter, Introduction to Physiology.

FIRST YEAR (Second half).

Laboratory experiments. Professor PORTER, Assistant Professor CANNON, and Dr. MAXWELL. <i>Daily, except Saturday.</i>	168
Conferences (55). Assistant Professor CANNON. <i>Daily except Saturday. First to fifteenth week, inclusive.</i>	28
Written tests (77). <i>Twenty minutes daily, except Monday and Saturday. First to fifteenth week, inclusive.</i>	26
Written tests (15). <i>One hour Mondays. First to fifteenth week, inclusive.</i>	15
Lectures (86). Professor PORTER and Assistant Professor CANNON. <i>Daily, except Saturday. Sixth to fifteenth week, inclusive.</i>	43
Special demonstrations (23). Assistant Professor CANNON. <i>Saturdays. First to fifteenth week, inclusive.</i>	15
Recitations (15). Professor BOWDITCH. <i>Saturdays. First to fifteenth week, inclusive.</i>	15
Discussion of Theses (43). <i>Daily, except Friday. Sixth to fifteenth week, inclusive.</i>	33
Thesis. Written by each student from the original sources.	
Reading of investigations. The reading of investigations and the discussion of these at the appropriate conference.	

THE ADVANCED COURSE.

Students in the fourth year of the Medical School may elect advanced instruction, at present consisting of one hundred and sixty hours of laboratory study, in any field of physiology. It is to be presumed that such students desire additional work in physiology to fit them for some special field of medicine, for example the diseases of the nervous system; or they may wish to pursue physiology, pathology, or some other biological science as a profession. They will be received into the research laboratories of the department, and will carry on their studies side by side with the members of the Staff. The work will consist of fundamental experiments, the study of accessory data, and the reading of selected original investigations. The student will be guided by personal conferences with the professor in charge, and, if desirable, by informal lectures. He may also attend the optional lectures given in May in which each member of the Staff discusses the subjects which he has himself investigated.

This course counts towards the degree of Doctor of Medicine, and an examination, largely practical, will be required.

FOURTH YEAR ELECTIVE.

Physiological Research. Professor W. T. PORTER.	160
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Physiological and Pathological Chemistry.

EDWARD S. WOOD, M.D., *Professor of Chemistry.*

JOHN M. CONNOLLY, M.D., *Assistant in Chemistry.*

HENRY F. HEWES, M.D., *Instructor in Clinical Chemistry.*

ROBERT L. EMERSON, M.D., *Instructor in Physiological Chemistry.*

CARL L. ALSBERG, M.D., *Assistant in Physiological Chemistry.*

First year.—The course in Physiological Chemistry extends through eight weeks and consists of a lecture, demonstration, or recitation daily, and of six laboratory exercises of two to three hours' duration a week. The course is so arranged that the student is enabled to conduct his laboratory work on the various subjects included in the course in direct connection with the lecture room instruction.

The subjects studied in this course are the carbohydrates; the proteids, their composition, relationships, chemical properties, methods of precipitation and separation; the fats; the chemistry of epithelial, connective, muscular, and nervous tissues; the chemistry of digestion; bile; blood; lymph; milk; and urine.

During the second half of the course (Pathological Chemistry), special attention is given to the clinical study of the urine. Each student examines, chemically and microscopically, a large number of specimens, and becomes thoroughly familiar with the composition of this secretion in normal and pathological conditions, and with the best methods for the detection of pathological constituents. The best methods for the quantitative determination of the more important normal and pathological constituents of the urine are also taught. The class in sections receives instruction in the diagnosis of renal and other diseases from the examination of the urines, and also has practical work in the examination of the blood and of gastric contents.

Opportunities for special investigation will be offered such students as can give the necessary time in the laboratory.

Text-books.—Hammarsten, *Physiological Chemistry*. Ogden, *Clinical Examination of the Urine*. Tyson, *Practical Examination of Urine*.

Collateral Reading.—Halliburton, *Text-book of Chemical Physiology and Pathology*. Wharton and Stillé, *Medical Jurisprudence*, Vol. II, on Poisons. Simon, *Physiological Chemistry*. Bunge, *Physiologic and Pathologic Chemistry*. Herter, *Lectures on Chemical Pathology*. Taylor on Poisons. Lea, *Chemical Basis of the Animal Body* (appendix to Foster's *Text-book of Physiology*). Vaughan and Novy, *Cellular Toxins*.

Fourth year.—The elective courses in Physiological and Pathological Chemistry are divided into two groups: those for undergraduates and graduates, and those primarily for graduates.

Advanced courses.—In the first group the various courses consist chiefly of advanced work in the subjects taught in the first year, viz., urine, bile, gastric contents, feces, pathological fluids and concretions, clinical examination of blood, medico-legal chemistry, etc. The various subjects will be divided into smaller groups, enabling a student to take special topics as he may desire.

Research courses.—In the second group the nature of the work will be much more advanced and consist chiefly of research work in the laboratory on special subjects to be mutually arranged with the Department. In addition to the subjects mentioned under the first group opportunity will be offered in experimental work in metabolism, medico-legal chemistry, and in other lines of advanced work, also special lines of work for those intending to fit themselves as teachers in physiological and pathological chemistry.

PHYSIOLOGICAL AND PATHOLOGICAL CHEMISTRY.

FIRST YEAR.

Lectures and demonstrations.	Professor WOOD and Dr. EMERSON.	<i>One hour four times a week.</i>	64
Laboratory exercises.	Professor WOOD, and Drs. CONNOLLY, HEWES, EMERSON, and ALSBERG.	<i>Two and a half hours a day four times a week, three and a half hours once a week.</i>	216

FOURTH YEAR ELECTIVE.

Physiological Chemistry.

1. A laboratory course following the general lines of instruction in physiological chemistry given at present in the first year, to comprise more advanced work in the subjects of the first-year course. Four months must be elected. 250 hours, 2-6 P.M., Mondays, Tuesdays, Wednesdays, and Thursdays in October, November, December, and January.
2. A number of research courses on special subjects. 125 to 250 hours each.
3. An advanced course of 1000 hours, primarily for graduates. Only those previously trained in inorganic and organic chemistry will be admitted to this course.

Pathological and Medico-Legal Chemistry.

1. Advanced work on the clinical examination of the urine, particularly with reference to the diagnosis of so-called urinary diseases, and to the study of the metabolism in other diseases. This course also includes the analysis of urinary calculi; and incidentally the composition of biliary calculi might be included, as well as concretions in other parts of the body. The work on this course should be almost entirely laboratory work under personal instruction, with a few lecture room demonstrations or exercises in diagnosis by means of lantern slide exhibits.
2. Advanced work on the clinical examination of the blood and gastric contents, particularly with reference to the diagnosis of blood and stomach diseases.
3. The study of toxicology and medico-legal chemistry generally. This course has heretofore been included in the regular course of clinical chemistry given to the second class.
4. Analysis of the urine for some of the special poisons or drugs, such as arsenic, lead, mercury, morphine, and strychnine.

Four courses forenoon or afternoon, every day, except Saturday afternoons, first half-year, 250 hours each, or every other day, 125 hours.

5. More advanced courses of 500 or 1000 hours each for those who may desire to work up some special subject in pathological chemistry, or for those who desire to fit themselves to become teachers in clinical or pathological chemistry. Primarily for graduates. Only those previously trained in inorganic and organic chemistry will be admitted to this course.

Bacteriology.

HAROLD C. ERNST, M.D., *Professor of Bacteriology.*

HIBBERT W. HILL, M.D., *Instructor in Bacteriology.*

CALVIN G. PAGE, M.D., *Assistant in Bacteriology.*

WILLIAM H. ROBEY, Jr., M.D., *Assistant in Bacteriology.*

HENRY J. PERRY, M.D., *Assistant in Bacteriology.*

EUGENE E. EVERETT, M.D., *Assistant in Bacteriology.*

LANGDON FROTHINGHAM, M.D.V., *Austin Teaching Fellow in Bacteriology.*

Second year. — Required bacteriology is taught by lectures and practical laboratory work. The lectures treat of the general subject and of methods of practical work. In the laboratory each student has an opportunity to become familiar with the simpler methods of manipulation and staining which are of especial clinical value, and with the more prominent of the pathogenic bacteria.

Fourth year. — The elective course offered is mainly practical.

Opportunities for special investigation will be offered such students as can give the necessary time in the laboratory.

Text-books. — Muir and Ritchie. Abbott. Park.

Collateral Reading. — Sternberg. Heim. Migula.

SECOND YEAR.

Lectures. Professor ERNST. *Daily, except Saturdays, during October and November.* 40

Laboratory work. Professor ERNST, and Drs. PAGE, ROBey, PERRY, EVERETT, and FROTHINGHAM. *Two to three hours daily during October and November.* 120

FOURTH YEAR ELECTIVE.

Advanced Bacteriology. Professor ERNST, and Drs. PAGE, ROBey, and PERRY. Lectures and laboratory work during the second half-year. (This course is intended to encourage original work.) 172

Pathology.

WILLIAM T. COUNCILMAN, M.D., *Shattuck Professor of Pathological Anatomy.*

FRANK B. MALLORY, M.D., *Associate Professor of Pathology.*

JAMES H. WRIGHT, M.D., *Instructor in Pathology.*

GEORGE B. MAGRATH, M.D., *Assistant in Pathology.*

HENRY A. CHRISTIAN, M.D., *Instructor in Pathology.*

CLARENCE W. KEENE, M.D., *Assistant in Neuropathology and in Pathology.*

WALTER R. BRINCKERHOFF, M.D., *Assistant in Pathology.*

ELMER E. SOUTHARD, M.D., *Instructor in Neuropathology.*

ERNEST E. TYZZER, M.D., *Assistant in Pathology.*

Second year. — The course in Pathology consists of laboratory work, demonstrations, conferences, and lectures. During the forenoons of October and November a course in general pathology is given. The basis of the work is formed by a laboratory course in which microscopic work is combined with demonstrations and examinations of gross specimens. A lecture with stereopticon demonstrations is given daily at the end of the exercises in order to explain more fully the lesions studied in the laboratory.

During the forenoons of December and of the first and second weeks of January the work consists chiefly of the study and diagnosis of tissues from post-mortem examinations. So far as possible all the organs from a cadaver are demonstrated together, and the relation of the lesions

explained. The organs are examined by the naked eye, and microscopically in frozen sections. Tumors and other pathological products are examined in the same way. An abundance of material is provided for the course. Lectures and laboratory talks are given daily.

In the forenoons of the last two weeks of January, Professor T. SMITH gives a course of lectures and laboratory exercises on animal parasites, particularly the protozoa and the infections produced by them.

During the afternoons of December and January two courses are given in the special pathology of neurology and surgery; the courses constitute a valuable introduction to the clinical work required in these subjects in the third year.

These courses are :—

(a) Fifteen demonstrations and laboratory exercises on the pathology of the nervous system. (See Neurology.)

(b) Twenty laboratory exercises in surgical pathology. (See Surgery.)

Text-books.—Ziegler, General and Special Pathology. Stengel, A Text-book of Pathology. Mallory and Wright, Pathological Technique.

Collateral Reading.—Thoma, Pathologische Anatomie. Orth, Pathologische Anatomie; Diagnostik. Ribbert, Pathologische Histologie, Lehrbuch der Allgemeinen Pathologie. Lubarsch and Ostertag, Ergebnisse der Pathologie und Anatomie. Neveu-Lemaire, Parasitologie animale. Braun, Die tierischen Parasiten des Menschen.

SECOND YEAR.

Lectures or conferences. Professor COUNCILMAN. *Daily for fourteen weeks, October, November, December, and January.* 84

Lectures. Professor T. SMITH. *One hour daily, third and fourth weeks of January.* 12

Laboratory work. Professors COUNCILMAN and MALLORY, and Drs. WRIGHT, MAGRATH, CHRISTIAN, and KEENE. *Three hours daily during the forenoons of October, November, December, and the first two weeks of January.* 252

Demonstrations and laboratory work. Professor T. SMITH. *Two hours daily, third and fourth weeks of January.* 24

Neuropathology. Dr. SOUTHARD. *Afternoons in December.* 45

Surgical pathology. Asst. Professor NICHOLS. *Afternoons in January.* 60

Comparative Pathology.

THEOBALD SMITH, M.D., *George Fabyan Professor of Comparative Pathology.*

HERBERT R. BROWN, B.S., *Austin Teaching Fellow in Comparative Pathology.*

Second year. — A short course on the pathogenic protozoa and higher animal parasites is given in January as a part of the course in Pathology (see above).

Fourth year. — An elective course consisting of lectures and demonstrations on the comparative etiology of infectious diseases is given during the second half-year. In this course much time is devoted to a consideration of the general principles underlying infection and immunity, and their application to diagnosis, prevention, and therapy (vaccines, anti-toxins, agglutinins, etc.). The public-health problems arising from the interrelation of human and animal diseases are also discussed.

A few graduate students qualified to carry on investigations may be accommodated at the laboratory at Forest Hills from October to June.

SECOND YEAR.

Lectures. Professor T. SMITH. (H.M.S.) *One hour daily, third and fourth weeks of January.* 12

Demonstrations and laboratory work. Professor T. SMITH, and Drs. MAGRATH, CHRISTIAN, and KEENE. *Two hours daily, third and fourth weeks of January.* 24

(This course forms part of the required work in Pathology.)

FOURTH YEAR ELECTIVE.

Lectures. Professor SMITH. (H.M.S.) *Twice a week, second half-year.* 32

Materia Medica and Therapeutics.

FRANZ PFAFF, M.D., *Assistant Professor of Pharmacology and Therapeutics.*

JAMES O. JORDAN, Ph.G., *Assistant in Materia Medica.*

MAURICE P. O. VEJUX-TYRODE, M.D., *Instructor in Pharmacology.*

Second and Third years. — Instruction is given by lectures and recitations, and by demonstrations of the physiological action of drugs. The lectures are supplemented by an optional course in practical pharmacy, in which the compounding of prescriptions is illustrated. In addition to the lectures on therapeutics, the practical relation of remedies to diseased conditions is dwelt on in the exercises in the departments of Theory and Practice, and of Clinical Medicine.

A special laboratory has been equipped for original research in Experimental Pharmacology and Therapeutics; here a voluntary course, open to a limited number of duly qualified undergraduates, affords opportunity for practical training and instruction in the methods and use of the special apparatus employed in determining the toxic and physiological actions of drugs, and their practical value as remedies.

Text-book. — A. R. Cushny, Pharmacology and Therapeutics.

Collateral Reading. — Schmiedeberg, Arzneimittellehre. Binz, Vorlesungen ueber Pharmacologie. H. C. Wood, Therapeutics. Brunton, Pharmacology, Materia Medica, and Therapeutics.

SECOND YEAR.

Pharmacology lectures. Assistant Professor PFAFF. *Twice a week, Feb. to May inclusive.* 32

Materia Medica lectures. Dr. VEJUX-TYRODE. *Once a week, Feb. to May inclusive.* 16

Voluntary laboratory work. Mr. JORDAN and Dr. VEJUX-TYRODE. *Two hours once a week during April and May.*

THIRD YEAR.

Lectures on Therapeutics. Asst. Professor PFAFF. *Once a week, first half-year.* 16

The Theory and Practice of Physic.

REGINALD H. FITZ, M.D., *Hersey Professor of the Theory and Practice of Physic.*

ELBRIDGE G. CUTLER, M.D., *Instructor in the Theory and Practice of Physic.*

ARTHUR K. STONE, M.D., *Assistant in the Theory and Practice of Physic.*

ELLIOTT P. JOSLIN, M.D., *Assistant in the Theory and Practice of Physic.*

FRANKLIN W. WHITE, M.D., *Assistant in the Theory and Practice of Physic.*

GEORGE S. C. BADGER, M.D., *Assistant in the Theory and Practice of Physic.*

JOSEPH H. PRATT, M.D., *Assistant in the Theory and Practice of Physic.*

Second and Third years. — Lectures. Lectures on selected topics are given at the Medical School.

Clinical Exercises. — Clinical exercises in which the students are called upon to take an active part are given at the Massachusetts General Hospital.

Ward Visits. — Students in sections will visit patients at stated intervals in the wards of the Massachusetts General Hospital.

Section Teaching. — Small sections of the class will be drilled in the larger hospitals and clinics in the taking of histories and in the examination of urine, blood, sputum, and gastric contents.

Text-books. — Osler, Practice of Medicine. Tyson, Practice of Medicine. Strümpell, Text-book of Medicine.

Collateral Reading.—Loomis-Thompson, American System of Practical Medicine. Allbutt, System of Medicine. Nothnagel, Specielle Pathologie und Therapie. Eulenburg, Real-Encyclopädie der gesammten Heilkunde.

SECOND YEAR.

Lectures on selected topics. Professor FITZ. (H.M.S.)	<i>Twice a week, second half-year.</i>	32
Clinical lectures. Professor FITZ. (M.G.H.)	<i>Once a week, second half-year.</i>	16
Clinical lectures. Dr. CUTLER. (M.G.H.)	<i>Twice a week, second half-year.</i>	32
Exercises in sections. Drs. STONE, JOSLIN, WHITE, BADGER, and PRATT.	<i>Twice a week, second half-year, for each student.</i>	32

THIRD YEAR.

Lectures on selected topics. Professor FITZ. (H.M.S.)	<i>Twice a week, first half-year.</i>	32
Clinical lectures. Professor FITZ. (M.G.H.)	<i>Twice a week, first half-year.</i>	32
	<i>Once a week, second half-year.</i>	16
Clinical lectures. Dr. CUTLER. (M.G.H.)	<i>Once a week, first half-year.</i>	16
Ward Visits. Dr. CUTLER. (M.G.H.)	<i>During the year.</i>	8
Exercises in sections. Drs. STONE, JOSLIN, WHITE, BADGER and PRATT.	<i>First half-year.</i>	8

Clinical Medicine.

FREDERICK C. SHATTUCK, M.D., *Jackson Professor of Clinical Medicine.*
 GEORGE G. SEARS, M.D., *Assistant Professor of Clinical Medicine.*
 CHARLES F. WITHINGTON, M.D., *Instructor in Clinical Medicine.*
 HERMAN F. VICKERY, M.D., *Instructor in Clinical Medicine.*
 HENRY JACKSON, M.D., *Instructor in Clinical Medicine.*
 JAMES M. JACKSON, M.D., *Assistant in Clinical Medicine.*
 RICHARD C. CABOT, M.D., *Instructor in Clinical Medicine.*
 FRANCIS P. DENNY, M.D., *Assistant in Clinical Medicine.*
 WILLIAM H. ROBESY, Jr., M.D., *Assistant in Clinical Medicine.*
 WILLIAM H. SMITH, M.D., *Assistant in Clinical Medicine.*
 EDWIN A. LOCKE, M.D., *Assistant in Clinical Medicine.*

The study of Clinical Medicine begins with the second half of the second year. Daily instruction is given by clinical lectures, hospital visits, and other exercises. The teaching for the second, third, and

fourth years is graded and separate for each year, except that students of the fourth class are allowed to attend the clinical lectures given for the third class, if they wish.

Second year. — The following courses continue for four months:—

Physical diagnosis for the class in small sections. Every student attends two exercises a week.

Clinical instruction for the entire class, five times a week, in case taking, diagnostic methods, diagnosis, and treatment.

Third year. — Four exercises a week are held in the hospital amphitheatres. The teaching is more advanced, with greater stress on therapeutics. The amount of clinical material is so large that during the year a wide range of diseases is illustrated practically. Even of the rarer affections often several examples are shown.

Fourth year. — The class has two clinics a week at which special attention is paid to Clinical Therapeutics.

Conferences are held once a week throughout the year. A medical case is assigned to every student. He is required to work it up thoroughly and to write out in full the history, physical examination, differential diagnosis, and treatment. From the papers thus prepared certain ones are selected to be read before the teachers in the department and the students at the weekly conference. A full discussion is encouraged.

Every student is required to take at least one month's service in a medical out-patient department under the supervision of the head of the clinic.

Twice a week in the second half-year the entire class has an exercise in diagnosis. Cases are examined by the students themselves under supervision, and the class is drilled in differential diagnosis with the help of printed cases.

Text-books. — Osler, Practice of Medicine. Strümpell, Text-book of Medicine. Musser, Medical Diagnosis. Simon, Clinical Diagnosis. Cabot, Physical Diagnosis.

Collateral Reading. — Allbutt, System of Medicine. Twentieth Century Practice of Medicine. Nothnagel, Specielle Pathologie und Therapie. Fagge and Pye-Smith, Practice of Medicine. Gowers, Diseases of the Nervous System. Hare, Practical Diagnosis. Butler, Diagnostics of Internal Medicine. Le Fevre, Physical Diagnosis.

SECOND YEAR.

Clinics. Professor SHATTUCK and Dr. VICKERY (M.G.H.) and Assistant Professor SEARS and Dr. H. JACKSON (B.C.H.). *Five times a week, second half-year.* 80

Physical Diagnosis. Drs. CABOT and J. M. JACKSON (M.G.H.), Dr. ROBESY (B.C.H.), and Dr. DENNY (B.D.). *Two exercises a week, second half-year, for each student.* 32

THIRD YEAR.

Clinics. Professor SHATTUCK. (M.G.H.)	<i>Twice a week, first half-year; once a week, second half-year.</i>	48
Assistant Professor SEARS. (B.C.H.)	<i>Once a week.</i>	32
Dr. H. JACKSON. (B.C.H.)	<i>Once a week, first half-year.</i>	16
Dr. WITHINGTON. (B.C.H.)	<i>Twice a week, second half-year.</i>	32

FOURTH YEAR.

Clinics with special reference to therapeutics. Professor SHATTUCK. (M.G.H.)	<i>Once a week.</i>	32
Practical Therapeutics. Assistant Professor SEARS. (B.C.H.)	<i>Once a week.</i>	32
Clinics. Dr. SEARS. (B.C.H.)	<i>Once a week, second half-year.</i>	16
Clinical conferences. (H.M.S.)	<i>Once a week.</i>	32
Practical exercises in clinical diagnosis. Dr. R. C. CABOT. (M.G.H.)	<i>Twice a week for two hours, second half-year.</i>	64

PEDIATRICS.

THOMAS MORGAN ROTCH, M.D., *Professor of Pediatrics.*
 JOHN H. MCCOLLOM, M.D., *Assistant Professor of Contagious Diseases.*
 GEORGE A. CRAIGIN, M.D., *Clinical Instructor in Pediatrics.*
 JOHN L. MORSE, M.D., *Instructor in Pediatrics.*
 MAYNARD LADD, M.D., *Assistant in Pediatrics.*
 CHARLES H. DUNN, M.D., *Assistant in Pediatrics.*

Third Year. — Lectures on selected topics preparatory for the clinical teaching are given early in the year. Clinical lectures are given from November to April inclusive at the Children's Hospital and at North Grove Street; the students are required to take an active part in the examination and discussion of the cases. A certain number of recitations on subjects selected as best taught in this way are held in the course of the year, and a large amount of case teaching occurs in the latter part of the year. Sectional teaching at the bedside is given from October to May inclusive, and comprises a large proportion of the year's instruction. During the first half-year the class in sections receives instruction three times a week in the contagious wards of the Boston City Hospital, where each student is shown and examines cases of diphtheria, scarlet fever, and measles. Each student is taught the technique of intubation, and has an opportunity to see intubation performed. A written report of the cases seen is required. In all the clinical and sectional teaching especial attention is paid to clinical therapeutics.

Fourth Year.—In the second half-year the class, divided into sections, is given an opportunity to become practically familiar with diphtheria, scarlet fever, and measles, their diagnosis, course, and treatment. This exceptional opportunity is rendered possible by the abundant material of the South or Contagious Department of the Boston City Hospital, which accommodates two hundred and fifty patients.

Text-book.—Rotch, Pediatrics.

Collateral Reading.—Keating, Cyclopaedia of the Diseases of Children. Northrup, American Edition of The Diseases of Children, by Ashby and Wright. Jacobi, Therapeutics of Infancy and Childhood. Holt, Diseases of Infancy and Childhood. Sachs, The Nervous Diseases of Children.

THIRD YEAR.

Lectures. Professor Rotch. (H.M.S.) *Once a week, October 6 to December 22; twice a week, February 2 to February 28; once a week, March 7 to April 15.* 25

Dr. LADD. (H.M.S.) *Once a week, January 3 to January 31.* 5

Clinical lectures. Professor Rotch. (Ch.H.) *Once a week, October 7 to February 3.* 16

Dr. MORSE. (North Grove St.) *Once a week, February 10 to March 31.* 8

Recitations and Case Teaching. Dr. MORSE. *Once a week, March 2 to April 13; twice a week, April 23 to May 25.* 17

Section Teaching.

Assistant Professor McCOLLOM. (S.D.B.C.H.) *Three times a week, first half-year.*

Dr. MORSE. (Ch.H. and I.H.) *27 times, first half-year; 10 times, second half-year.*

Dr. CRAIGIN. (Ch.H.) *48 times, first half-year; 15 times, second half-year.*

Dr. LADD. (Ch.H. and I.H.) *49 times, first half-year; 20 times, second half-year.*

Dr. DUNN. (Ch.H. and I.H.) *41 times, first half-year; 33 times, second half-year.*

Each student receives 29 hours of section teaching. 29

FOURTH YEAR.

Section Teaching. Assistant Professor McCOLLOM. (S.D.B.C.H.) *Twice a week, second half-year.*

Clinical Microscopy.

WILLIAM F. WHITNEY, M.D., *Curator of the Anatomical Museum.*

Fourth year. — The course during the first half-year is elective. A continuation of the course is given during the second half-year and is optional. The instruction is entirely practical in character. It includes the examination of fluids, tumors, curettings, and organs from autopsies. Special attention is paid to the microscopic examination of the material in the fresh condition.

Text-book. — Simon, Manual of Clinical Diagnosis.

FOURTH YEAR. ELECTIVE.

Laboratory exercises.	Dr. WHITNEY.	(H.M.S.)	<i>One hour, three times</i>	
			<i>a week, first half-year.</i>	48

OPTIONAL COURSE.

Laboratory exercises.	Dr. WHITNEY.	(H.M.S.)	<i>One hour, three times</i>	
			<i>a week, second half-year.</i>	48

Surgery.

The Division of Surgery is composed of the departments of surgery, clinical surgery, and orthopedic surgery.

- J. COLLINS WARREN, M.D., LL.D., *Moseley Professor of Surgery.*
 EDWARD H. BRADFORD, M.D., *Professor of Orthopedic Surgery.*
 MAURICE H. RICHARDSON, M.D., *Professor of Clinical Surgery.*
 HERBERT L. BURRELL, M.D., *Professor of Clinical Surgery.*
 EDWARD H. NICHOLS, M.D., *Assistant Professor of Surgical Pathology.*
 HENRY H. A. BEACH, M.D., *Lecturer on Surgery.*
 GEORGE W. GAY, M.D., *Lecturer on Surgery.*
 JOHN W. ELLIOT, M.D., *Lecturer on Surgery.*
 SAMUEL J. MIXTER, M.D., *Lecturer on Surgery.*
 GEORGE H. MONKS, M.D., *Lecturer on Surgery.*
 FRANCIS S. WATSON, M.D., *Lecturer on Genito-Urinary Surgery.*
 FRANCIS B. HARRINGTON, M.D., *Lecturer on Surgery.*
 ROBERT W. LOVETT, M.D., *Assistant in Orthopedics.*
 JOHN C. MUNRO, M.D., *Lecturer on Surgery.*
 ELLIOTT G. BRACKETT, M.D., *Assistant in Orthopedics.*
 PAUL THORNDIKE, M.D., *Instructor in Genito-Urinary Surgery.*
 JOEL E. GOLDTHWAIT, M.D., *Assistant in Orthopedics.*
 JAMES G. MUMFORD, M.D., *Instructor in Surgery.*
 JOHN B. BLAKE, M.D., *Instructor in Surgery.*
 WILLIAM A. BROOKS, Jr., M.D., *Assistant in Surgery.*
 WILLIAM E. FAULKNER, M.D., *Assistant in Surgery.*
 HOWARD A. LOTHROP, M.D., *Instructor in Surgery.*
 FRANKLIN G. BALCH, M.D., *Assistant in Surgery.*
 JOHN DANE, M.D., *Assistant in Orthopedics.*
 FRED B. LUND, M.D., *Assistant in Surgery.*
 CHARLES A. PORTER, M.D., *Instructor in Surgery.*
 GEORGE W. W. BREWSTER, M.D., *Assistant in Surgery.*
 ERNEST A. CODMAN, M.D., *Assistant in Surgery.*
 ROBERT B. GREENOUGH, M.D., *Assistant in Surgery.*
 DANIEL F. JONES, M.D., *Assistant in Surgery.*
 L. R. G. CRANDON, M.D., *Assistant in Surgery.*

FRANK L. RICHARDSON, M.D., *Austin Teaching Fellow in Surgery.*

Instruction is given by systematic lectures, recitations, lecture demonstrations, clinical lecture demonstrations, and by section teaching in the wards, in the out-patient departments, and in the laboratory.

Second and Third years.—A course in surgical pathology, consisting of laboratory exercises, in which are studied the healing of wounds, fractures, diseases of bones and joints, and the special pathology which is of surgical importance, is given in the month of January. A series of clinical lectures, illustrating the lesions studied in this course in the laboratory, is given at the Boston City Hospital. During the second half of the second year and in the first half of the third year the instruction consists of systematic lectures, recitations, demonstrations of surgical pathological material, and clinical demonstrations. Every week the student has four lectures, demonstrations or recitations, and four clinical exercises illustrating the lectures, demonstrations and recitations. In the first week the systematic lectures are given on surgical technic; in the second week on surgical materials and case-taking; in the third week on trauma, hemorrhage, sepsis, etc. The various subjects in surgery are taken up in successive weeks and illustrated contemporaneously by clinical lectures and demonstrations, until the end of the first half of the third year. As early as may be in the second half of the second year, the course in surgical technic is given. It consists of six hours of lectures to the entire class, and of twelve laboratory exercises, of two hours each, to the class in sections. The laboratory course consists of the application of bandages and surgical apparatus, and of the preparation and application of surgical dressings and materials by the students.

After the course in surgical technic the student is required to serve satisfactorily at least one month in the surgical out-patient department of the Massachusetts General Hospital or the Boston City Hospital. During this month of service as surgical dresser the student receives instruction in anesthesia and instruction in minor genito-urinary surgery. In the first half of the third year the student receives instruction in the surgical wards of the Massachusetts General and Boston City Hospitals. In this section teaching students have instruction on a number of selected subjects in major surgery, are brought into personal contact with the patient at the bedside, and have practical experience in the diagnosis, prognosis, and treatment of surgical cases.

A required course in orthopedic surgery is given in the first half of the year and consists of lectures at the Medical School and of clinical exercises at the Children's Hospital.

A required course in genito-urinary surgery is given in the first half of the third year, consisting of eight lectures. In the second half of the third year the class is divided into small sections, and each student receives instruction for six hours in the out-patient departments in the details of minor genito-urinary work.

Fourth year, 1904-05.—The instruction consists of the following exercises each week: one clinical lecture of one hour; one clinical lecture of two hours, in the second half of the year the second hour of this clinical lecture is devoted to case-teaching; one diagnosis clinic of two hours.

The course in regional surgery given by Professor M. H. Richardson twice a week in the first half-year is introductory to his clinical exercises at the Massachusetts General Hospital in the second half-year. Each anatomical structure is considered in its surgical aspects. Especial attention is paid to the surgery of the abdominal, thoracic, and cranial cavities.

The class is divided into small sections which receive instruction three hours a week for six weeks in the surgical wards of the Massachusetts General and Boston City Hospitals. In this section teaching the students have instruction on a number of selected subjects in major surgery, are brought into personal contact with the patient at the bedside, and have practical experience in the diagnosis, prognosis, and treatment of surgical cases.

Any student who has completed the work of the first three years may substitute for the sectional major surgery of the fourth year one month of satisfactory work as surgical dresser at the Relief Station of the Boston City Hospital.

A required course in orthopedic surgery is given in the first half of the year and consists of lectures at the Medical School and of clinical exercises at the Children's Hospital. There is an elective course given in the second half of the year consisting entirely of clinical work.

An elective course in operative surgery is given in which all the classic, as well as all the important modern, operations are illustrated upon the cadaver. Members of the third and fourth classes are permitted to attend the demonstrations. Students who elect the course repeat the operations on the cadaver under the supervision of the instructors. In connection with this course there are eight exercises on surgical landmarks.

In genito-urinary surgery an optional course is given consisting of lectures and clinical demonstrations at the Boston City Hospital.

Surgical operations of every variety are performed once a week both at the Massachusetts General and at the Boston City Hospitals.

Books recommended.—International Text-book of Surgery. Warren, Surgical Pathology. American Text-book of Surgery (edition of 1903). Park's Surgery by American Authors. Cheever, Lectures on Surgery. Dennis, System of Surgery. König, Lehrbuch der Speciellen Chirurgie. Bryant, Operative Surgery. Jacobson (and Steward), Operations of Surgery. Brewer, Text-book of Surgery. DaCosta, Modern Surgery. Albert, Surgical Diagnosis (translated by Frank). Scudder, Treatment

of Fractures. Stimson, Fractures and Dislocations. Marchand, Wundheilung. Gould, Elements of Surgical Diagnosis. Wharton, Minor Surgery and Bandaging. Whitman, Orthopedic Surgery. Bradford and Lovett, Orthopedic Surgery. Hoffa, Orthopädische Chirurgie. Keyes, Surgical Diseases of the Genito-Urinary Organs. Morton, Genito-Urinary Diseases and Syphilis. Mumford, Clinical Talks on Minor Surgery. Burrell and Blake, Case Teaching in Surgery.

SECOND YEAR.

- Laboratory course in Surgical Pathology. Assistant Professor NICHOLS. (H.M.S.) *Twenty three-hour exercises during January.* (See Pathology.) 60
- Clinical lectures in connection with the above course. Assistant Professor NICHOLS. (B.C.H.) *Twelve exercises during January.* 12
- Laboratory course in Surgical Technic. Dr. LOTHROP. *Six lectures to the entire class.* 6
- Twelve two-hour exercises for each student during second half of second year.* 24
- Systematic lectures, demonstrations, and recitations. Professors WARREN and BURRELL. (H.M.S.) *Four times a week.* 128
- Clinical demonstrations in connection with the above lectures. Professor RICHARDSON (M.G.H.), and Drs. J. B. BLAKE and LOTHROP (B.C.H.). *Four times a week.* 64

THIRD YEAR.

- Systematic lectures, demonstrations, and recitations. Professors WARREN and BURRELL. (H.M.S.) *Three times a week, first half-year.* 48
- Clinical demonstrations in connection with above lectures. Professors WARREN (M.G.H.) and BURRELL (B.C.H.). *Twice a week, first half-year.* 32
- Clinical lectures. Professor M. H. RICHARDSON. (M.G.H.) *Once a week, second half-year.* 16
- Professor BURRELL. (B.C.H.) *Once a week, second half-year.* 16
- Dr. GAY and Professor BURRELL. (B.C.H.) *Once a week, second half-year.* 16
- Clinical exercises in surgical wards. Drs. MUMFORD, BLAKE, BROOKS, FAULKNER, LOTHROP, BALCH, LUND, PORTER, COBB, COTTON, GREENOUGH, HUBBARD, and CRANDON. *Twice a week for eight weeks, first half-year.* 16
- Lectures and demonstrations. Orthopedic surgery. Professor BRADFORD. (H.M.S. and Ch. II.) *Once a week, first half-year.* 16

Lectures. Genito-Urinary Surgery. Dr. THORNDIKE. (H.M.S.)	<i>Once a week for eight exercises in October and November.</i>	8
Section teaching at the Hospitals.	<i>One hour a day for six days.</i>	6

FOURTH YEAR.

Clinical lectures and demonstrations.

Dr. MUMFORD. (M.G.H.)	<i>Once a week, first half-year.</i>	16
Professor M. H. RICHARDSON. (M.G.H.)	<i>Once a week, second half-year.</i>	16
Professor BURRELL. (B.C.H.)	<i>Once a week, for two hours, first half-year.</i>	32
Diagnosis in Clinical Surgery. Professor WARREN and Dr. C. A. PORTER. (M.G.H.)	<i>Once a week, for two hours, first half-year.</i>	32
Professor M. H. RICHARDSON. (M.G.H.)	<i>Once a week, for two hours, second half-year.</i>	32
Surgical clinic. Professor M. H. RICHARDSON and Dr. C. A. PORTER. (M.G.H.)	<i>Once a week, second half-year.</i>	16
Clinical lectures and case-teaching. Professor BURRELL and Drs. MONKS and BLAKE. (B.C.H.)	<i>Once a week, for two hours, second half-year.</i>	32
Lecture demonstrations in Regional Surgery. Professor M. H. RICHARDSON. (H.M.S.)	<i>Twice a week, first half-year.</i>	32
Clinical exercises in surgical wards. Drs. CUSHING, MUMFORD, BLAKE, BROOKS, FAULKNER, LOTHROP, BALCH, LUND, PORTER, GREENOUGH, and CRANDON.	<i>Three times a week for six weeks, second half-year.</i>	18
Lectures in Orthopedic Surgery. Professor BRADFORD. (H.M.S. and Ch.H.)	<i>Once a week, first half-year.</i>	16
Clinical exercises. Professor BRADFORD, and Drs. LOVETT, BRACKETT, GOLDTHWAIT, and DANE. (Ch.H.)	<i>In sections, twice a week, second half-year. Three exercises for each student.</i>	3

ELECTIVE.

Lecture demonstrations in Operative Surgery. Dr. MONKS. (H.M.S.)	<i>October, November, December.</i>	24
Repetition of the operations by the students under the supervision of the instructors. (H.M.S.)	<i>Fifteen hours, second half-year.</i>	15
Clinical exercises in Orthopedic Surgery. Professor BRADFORD. (Ch.H.)	<i>Twice a week, second half-year.</i>	32
<i>Also in sections four times a week, second half-year. (Every student measures for apparatus twice, and assists at operations two or three times.)</i>		8

OPTIONAL COURSE.

Clinical lectures in Genito-Urinary Surgery. Dr. THORNDIKE. (B.C.H.)	
Once a week, first half-year.	16
DR. WATSON. (B.C.H.) Once a week, second half-year.	16

Obstetrics and Gynaecology.

WILLIAM L. RICHARDSON, M.D., <i>Professor of Obstetrics.</i>	
FRANCIS H. DAVENPORT, M.D., <i>Assistant Professor of Gynaecology.</i>	
CHARLES M. GREEN, M.D., <i>Associate Professor of Obstetrics and Clinical Gynaecology.</i>	
MALCOLM STORER, M.D., <i>Assistant in Gynaecology.</i>	
FRANKLIN S. NEWELL, M.D., <i>Instructor in Obstetrics and Assistant in Gynaecology.</i>	
ERNEST B. YOUNG, M.D., <i>Assistant in Gynaecology.</i>	
HOWARD T. SWAIN, M.D., <i>Assistant in Obstetrics.</i>	
LEO V. FRIEDMAN, M.D., <i>Assistant in Obstetrics.</i>	
JAMES R. TORBERT, M.D., <i>Assistant in Obstetrics.</i>	

OBSTETRICS.

Third year. — Instruction is given by lectures, recitations, conferences, and clinical teaching. Students are required to take charge of at least six cases of labor, to receive clinical instruction on at least one of them, to care for their patients during the convalescence, and to make full written reports of the cases. Many of these reports are read at the conferences and discussed by the class and the instructors.

Fourth year. — An elective course in operative obstetrics, with practical illustrations on the cadaver and manikin, is given during the first half-year.

Text-book. — J. W. Williams, A Text-book of Obstetrics.

Collateral Reading. — Reynolds and Newell, Practical Midwifery. Hirst, A Text-book of Obstetrics. Lusk, The Science and Art of Midwifery. Dorland, Modern Obstetrics.

THIRD YEAR.

Lectures on the Theory and Practice of Obstetrics. Professor W. L. RICHARDSON. (H.M.S.)	Twice a week.	64
Recitations. Dr. NEWELL. (H.M.S.)	Once a week.	32
Conferences. Professor W. L. RICHARDSON, Professor GREEN, and Drs. NEWELL, SWAIN, FRIEDMAN, and TORBERT. (H.M.S.)	Once a week.	32

Practical instruction in Clinical Obstetrics. Drs. NEWELL, SWAIN, FRIEDMAN, and TORBERT. *Throughout the year, i.e. every student must receive instruction on one of the six cases of labor which he attends, and may call for instruction in the other five cases if he desires.*

ELECTIVE.

Operative Obstetrics. Professor GREEN. (H.M.S.) *Twelve practical exercises, November, December, and January.* 12

Repetition of the same exercises by the students under the supervision of Drs. NEWELL, SWAIN, FRIEDMAN, and TORBERT. *Three two-hour exercises for each student.* 6

GYNAECOLOGY.

Third year. — Lectures, recitations, and clinical instruction are given at the Boston City Hospital and the Boston Dispensary. The large outpatient departments of these institutions are utilized to accustom the student to the methods of examination, to the perfecting of diagnosis, and to the simple forms of treatment.

Fourth year. — An elective course is offered. The instruction is more advanced. Clinical and operative instruction is given in the wards of the Boston City Hospital. Cases are assigned to the students for examination, are reported in full at conferences held once a week, and are discussed by members of the class and by the instructors.

Text-book. — Garrigues, Diseases of Women.

Collateral Reading. — Skene, Diseases of Women. Davenport, Diseases of Women. Winckel, Diseases of Women. Emmet, Principles and Practice. Dudley, Diseases of Women. Byford, Manual of Gynaecology. Penrose, Textbook of Diseases of Women.

THIRD YEAR.

Lectures or recitations. Assistant Professor DAVENPORT. (H.M.S.) *Twice a week, second half-year.* 32

Clinical exercises. Dr. STORER (B.D.), Drs. NEWELL and YOUNG (B.C.H.). *In sections, six times a week till January, then three times a week. Every student receives six hours of instruction.* 6

FOURTH YEAR ELECTIVE.

Clinical and operative exercises. Professor GREEN. (B.C.H.) *Twice a week throughout the year.* 64

Clinical conferences. Professor GREEN. (H.M.S.) *Once a week, second half-year.* 16

Dermatology and Syphilis.

JOHN T. BOWEN, M.D., *Assistant Professor of Dermatology.*

ABNER POST, M.D., *Instructor in Syphilis.*

CHARLES J. WHITE, M.D., *Instructor in Dermatology.*

C. MORTON SMITH, M.D., *Assistant in Syphilis.*

DERMATOLOGY.

Third year. — A course of lectures, recitations, and demonstrations is given during October and November, and a weekly clinical exercise extends throughout the year.

Fourth year. — An elective course is given; the instruction is clinical. The out-patient department at the Massachusetts General Hospital and the skin ward furnish ample means of illustration. In connection with the work a special laboratory course is given on the pathological histology and parasitism of skin diseases, and on the methods of research employed.

Collateral Reading. — Stelwagon. Duhring. Hyde. Robinson. Crocker. Kaposi. v. Ziemssen. Besnier. Van Harlingen. Jackson. Taylor.

THIRD YEAR.

Lectures, demonstrations, and recitations on diseases of the skin. Assistant Professor BOWEN. (H.M.S.)	<i>Once a week during October and November.</i>	8
Clinical Dermatology. Assistant Professor BOWEN. (M.G.H.)	<i>Once a week.</i>	32
Clinical exercises. Assistant Professor BOWEN. (M.G.H.)	<i>In sections, twice a week, February and March.</i>	8

FOURTH YEAR ELECTIVE.

Clinical Dermatology. Dr. WHITE. (M.G.H.)	<i>Twice a week.</i>	64
Laboratory instruction in Pathological Histology and Parasitism. Dr. WHITE. (An optional course open to those who elect Clinical Dermatology.)	<i>Eight exercises of two hours each, during second half-year.</i>	16

SYPHILIS.

Third and Fourth years. — Lectures and clinical instruction are given at the Boston Dispensary.

THIRD YEAR.

Lectures. Dr. POST. (H.M.S.)	<i>Once a week, December and January.</i>	8
Clinical lectures. Drs. POST and SMITH. (B.D.)	<i>Once a week, April and May.</i>	8

Clinical exercises. Drs. POST and SMITH. (B.D.) *In sections, twice a week, second half-year. Each student attends six two-hour exercises.* 12

FOURTH YEAR.

Didactic and clinical lectures. Dr. POST. (B.D.) *Once a week, first half-year.* 16

Clinical exercises. Drs. POST and SMITH. (B.D.) *In sections, three times a week, first half-year. Each student attends six two-hour exercises.* 12

Neurology.

JAMES J. PUTNAM, M.D., *Professor of Diseases of the Nervous System.*
 GEORGE L. WALTON, M.D., *Clinical Instructor in Diseases of the Nervous System.*

PHILIP COOMBS KNAPP, M.D., *Clinical Instructor in Diseases of the Nervous System.*

EDWARD W. TAYLOR, M.D., *Assistant in Neurology.*

GEORGE A. WATERMAN, M.D., *Assistant in Neurology.*

Second year. — Instruction is given during December on the pathology of the nervous system. The course is illustrated by lantern projections of histological preparations and by work in the laboratory.

Third year. — During the first half-year one lecture a week, and during the second half-year two lectures a week, are given at the Massachusetts General Hospital. The lectures are illustrated by cases from the large and excellent out-patient service, and from the medical and surgical wards of the hospital. In addition, the students are given an opportunity to study cases outside the lecture hours, and to report on them.

Fourth year. — Elective course. Every student receives two to three hours of clinical instruction a week, and has access to the clinical material furnished by the Massachusetts General and the Boston City Hospitals.

Text-book. — Putnam and Waterman, *Studies in Neurological Diagnosis.*

Collateral Reading. — Gowers, *Diseases of the Nervous System.* Dana, *Text-book of Nervous Diseases.* Herter, *Manual of Diagnosis of Nervous Diseases.* Sachs, *Nervous Diseases of Children.* Mills, *The Nervous System and Its Diseases.* Oppenheim, *Diseases of the Nervous System* (English translation). Berkeley, *Mental Diseases.* Church and Petersen, *Nervous and Mental Diseases.* Jacob, *Atlas of the Nervous System.*

SECOND YEAR.

Pathology of the Nervous System. Dr. SOUTHARD. (H.M.S.) *Fifteen exercises during December.* (See Pathology.) 45

THIRD YEAR.

Clinical exercises. Professor PUTNAM. (M.G.H.) *Once a week, first half-year; twice a week, second half-year.* 48

FOURTH YEAR ELECTIVE.

Clinical exercises. Professor PUTNAM. (M.G.H.) *Once a week, first half-year.* 16

Dr. WALTON. (M.G.H.) *Twice a week, first half-year.* 32

Dr. KNAPP. (B.C.H.) *Twice a week, second half-year.* 32

Psychiatry.

EDWARD COWLES, M.D., LL.D., *Clinical Instructor in Mental Diseases.*

WILLIAM NOYES, M.D., *Clinical Instructor in Mental Diseases.*

Third year.—Systematic lectures are given at the Medical School during the second half-year.

Fourth year.—Optional course. Clinical instruction is given twice a week during February, March, and April at the new McLean Hospital at Waverley, and at the Boston Insane Hospital (Pierce and Austin Farms).

Text-books.—Clouston. Folsom, Monograph in Pepper's System of Medicine. Regis. Chapin.

Collateral Reading.—J. Bevan Lewis. Spitzka. Tuke, Dictionary of Psychiatric Medicine. Kraepelin, Psychiatrie. Hyslop, Mental Physiology. James, Psychology.

THIRD YEAR.

Lectures. Dr. COWLES. (H.M.S.) *Once a week, second half-year.* 16

FOURTH YEAR. OPTIONAL COURSE.

Clinical instruction. Dr. COWLES. (McL.H.) *Once a week during February, March, and April.* 12

Dr. NOYES. (B.I.H.) *Once a week during February, March, and April.* 12

Ophthalmology.

MYLES STANDISH, M.D., *Assistant Professor of Ophthalmology.*

EDWIN E. JACK, M.D., *Assistant in Ophthalmology.*

ALEXANDER QUACKENBOSS, M.D., *Assistant in Ophthalmology.*

HENRY H. HASKELL, M.D., *Assistant in Ophthalmology.*

EDMUND W. CLAP, M.D., *Assistant in Ophthalmology.*

FRED M. SPALDING, M.D., *Assistant in Ophthalmology.*

Third and Fourth years.—Instruction consists of lectures and of clinical demonstrations at the Massachusetts Charitable Eye and Ear Infirmary.

In the elective course every student receives four hours of clinical instruction a week. This includes instruction in the use of the ophthalmoscope, the examination of patients for errors of refraction, and clinical work in the wards and out-patient department of the Massachusetts Charitable Eye and Ear Infirmary.

Text-books.—DeSchweinitz. Fuchs. Swanzy. Jackson.

Collateral Reading.—Loring, On the Ophthalmoscope. Landolt, Refraction and Accommodation. Noyes. Norris and Oliver, System of Diseases of the Eye. Haab, Atlas of the External Diseases of the Eye.

THIRD AND FOURTH YEARS.

Lectures. Assistant Professor STANDISH. (H.M.S.) *Three times a week, in October and the first week of November.* 16

Clinical exercises. Drs. JACK, QUACKENBOSS, CLAP, SPALDING, and HASKELL. (E. and E.I.) *In sections, ten hours a week, first half-year. Every student receives fourteen hours of instruction.* 14

ELECTIVE.

Clinical exercises. Assistant Professor STANDISH. (E. and E.I.) *Two two-hour exercises a week, second half-year.* 64

Otology.

CLARENCE J. BLAKE, M.D., *Professor of Otology.*

EUGENE A. CROCKETT, M.D., *Assistant in Otology.*

PHILIP HAMMOND, M.D., *Assistant in Otology.*

Third and Fourth years.—Lectures are given at the Medical School, and clinical instruction at the Massachusetts Charitable Eye and Ear Infirmary.

Text-books.—Buck. Bacon. Brühl and Politzer.

Collateral Reading.—Poltitzer, Text-book of Diseases of the Ear; 4th ed., translated by Ballin and Heller. Schwartze, Handbuch der Ohrenheilkunde.

THIRD YEAR.

Lectures. Professor BLAKE. (H.M.S.) *Once a week, second half-year.* 16

Clinical exercises. (E. and E.I.) *In sections, two hours, three times a week, second half-year. Every student attends four or five exercises.* 8-10

FOURTH YEAR.

- Lectures. Professor BLAKE. (H.M.S.) *Twice a week during October, November, and December.* 24
- Clinical exercises. Drs. CROCKETT and HAMMOND. (E. and E. I.) *In sections, two hours, three times a week, first half-year. Every student attends four or five exercises.* 8-10
- Anatomy of the ear. Dr. HAMMOND. (H.M.S.) *Two recitations a week during October. One exercise for each student.* 1

ELECTIVE.

- Clinical exercises. Professor BLAKE, and Drs. CROCKETT and HAMMOND. (E. and E. I.) *Three two-hour exercises a week, second half-year.* 96

Laryngology and Rhinology.

- THOMAS A. DEBLOIS, M.D., *Clinical Instructor in Laryngology.*
- JOHN W. FARLOW, M.D., *Clinical Instructor in Laryngology.*
- ALGERNON COOLIDGE, Jr., M.D., *Clinical Instructor in Laryngology.*
- FREDERIC C. COBB, M.D., *Assistant in Laryngology.*
- ROCKWELL A. COFFIN, M.D., *Assistant in Laryngology.*
- HARRIS P. MOSHER, M.D., *Assistant in Laryngology.*

Third and Fourth years.—Instruction in this department consists of lectures and demonstrations, and of training in the use of instruments. The entire class has one lecture a week during a half-year. For the practical work at the Massachusetts General and Boston City Hospitals, and the Boston Dispensary, the class is divided into small sections.

THIRD YEAR.

- Lectures. Dr. COOLIDGE. (H.M.S.) *Once a week, second half-year.* 16
- Clinical exercises. Drs. FARLOW (B.C.H.), COBB (B.D.), and COFFIN (B.C.H.). *In sections, second half-year. Twelve exercises for each student.* 12

FOURTH YEAR.

- Lectures. Dr. DEBLOIS. (H.M.S.) *Once a week, first half-year.* 16
- Clinical exercises. Drs. DEBLOIS (B.C.H.), COOLIDGE (M.G.H.), and MOSHER (M.G.H.). *In sections, first half-year. Twelve exercises for each student.* 12

Legal Medicine.

Third and Fourth years. — Legal Medicine will no longer be taught as a separate study; but the several departments will give instruction in the medico-legal aspects of their respective subjects.

Text-book. — Taylor, Manual of Medical Jurisprudence.

Collateral Reading. — Witthaus and Becker.

FOURTH YEAR.

EZRA R. THAYER, LL.B., will deliver a voluntary course of not more than six lectures on the relation of the medical profession to the law and the courts.

Hygiene.

CHARLES HARRINGTON, M.D., *Assistant Professor of Hygiene.*

DAVID H. WALKER, M.D., *Assistant in Hygiene.*

Second and Fourth years. — The instruction consists of lectures and demonstrations.

The elective laboratory course is open to specially qualified students who may be desirous of undertaking special research, or of acquiring a practical knowledge of the analysis of foods, water, air, soils, etc.

Text-book. — Harrington, Practical Hygiene.

Collateral Reading. — Notter, Hygiene. Manson, Tropical Diseases. Newsholme, Vital Statistics. Mason, Water Supply. Abbott, Hygiene of Transmissible Diseases.

SECOND AND FOURTH YEARS.

Lectures and demonstrations. Assistant Professor HARRINGTON. (H.M.S.)

Three times a week, second half-year. 48

ELECTIVE.

Laboratory course for specially qualified students. Assistant Professor

HARRINGTON and Dr. WALKER. (H.M.S.) *Three hours, three times*

a week, second half-year. 144

Municipal Sanitation.

SAMUEL H. DURGIN, M.D., *Lecturer on Hygiene.*

FOURTH YEAR. OPTIONAL COURSE.

Lectures. Dr. DURGIN. (H.M.S.) *Twice a week, February and March.* 16

EXAMINATIONS.

The final examination in every required subject is held at the close either of the first or of the second term of the school year. The examination, therefore, in every subject occurs once a year, but an opportunity to make up failures in examinations is offered at the opening of the school year. The examination in certain studies of the first and fourth years is held at *mid-year* only, and is for those who are members of the School at the time, and for those entitled to apply for the degree, provided they have failed previously in those subjects. The *June examination* is only for those who are members of the School at the time, and for those entitled to apply for the degree. The *September examination* is only for those who have been examined previously and have failed in the subject of the examination, or for applicants for advanced standing. In some subjects a portion of the examination consists of practical work in the laboratory.

The exercises of the fourth year are omitted during the week of the mid-year examinations.

The amount of time credited to each examination is as follows:—

First year.—Anatomy* (3 hrs.), Histology and Embryology* (3 hrs.), Physiology (3 hrs.), Physiological and Pathological Chemistry (3 hrs.).

Second year.—Bacteriology* (1 hr.), Pathology* (2 hrs. written, 1 hr. practical), Hygiene (1 hr.).

Third year.—Materia Medica and Therapeutics* (2 hrs.), Theory and Practice* (3 hrs.), Clinical Medicine (3 hrs.), Pediatrics (2 hrs.), Surgery* (2 hrs. written, 1 hr. practical), Clinical Surgery (1 hr. written, 1 hr. practical), Obstetrics (3 hrs.), Gynaecology (1 hr.), Dermatology (1 hr.), Syphilis (1 hr.), Neurology (1 hr.), Psychiatry (1 hr.), Ophthalmology* (1 hr.), Otology (1 hr.), Laryngology (1 hr.).

Fourth year.—Clinical Medicine (3 hrs.), Clinical Surgery (3 hrs.), Orthopedics* (1 hr.), Syphilis* (1 hr.), Ophthalmology*† (1 hr.), Otology* (1 hr.), Laryngology* (1 hr.), Hygiene (1 hr.).

Electives.—Anatomy (2 hrs.), Advanced Histology (2 hrs.), Histology of the Nervous System (2 hrs.), Embryology (2 hrs.), Physiology (2 hrs.), Physiological Chemistry (2 hrs.), Clinical Chemistry* (1 hr.), Bacteriology (2 hrs.), Comparative Etiology of Infectious Diseases (1 hr.), Clinical Microscopy* (1 hr.), Operative Surgery (1 hr.), Orthopedics (2 hrs.), Operative Obstetrics* (1 hr.), Gynaecology (2 hrs.), Dermatology (2 hrs.), Neurology (2 hrs.), Ophthalmology (practical, 1 hr., written, 1 hr.), Otology (2 hrs.), Hygiene (2 hrs.).

* The examinations in these subjects are held at the end of the first half-year.

† In addition to the written examination in Ophthalmology, there will be a practical examination which will count as forty per cent. of the total.

In addition to the above examinations every student is required :—

To dissect the three parts of the body to the satisfaction of the demonstrator ;

To present a satisfactory report of the analysis of a specimen of urine, and of the clinical examination of a specimen of blood ;

To receive practical instruction in anesthesia ;

To work in medical out-patient departments during a period not exceeding four weeks, and to make a full written report on one or more medical cases ;

To present a certificate that he has satisfactorily served as a surgical dresser in the surgical out-patient department of the Massachusetts General Hospital or Boston City Hospital for at least one month after taking the course in surgical technic in the second half of the second year ;

To take charge of and report on six cases in Obstetrics, and to receive instruction on at least one of them ;

To furnish satisfactory evidence of having engaged in the practical exercises in Theory and Practice ;

To report a clinical case in each of the electives, Orthopedic Surgery and Ophthalmology, if elected.

In the fourth year, three hours of examinations in electives are obligatory. *The choice of electives must be handed to the Secretary, in writing, on blanks furnished at the Dean's office, on or before 1 p.m. of the first Saturday of the term.*

The general elective courses are open to all members of the fourth class who elect them with the intention of taking the examination.

The examinations in the required courses in Orthopedic Surgery, Ophthalmology and Otology cannot be taken by those who choose electives in these subjects. Instead, there is a two-hour examination in the elective, of which one hour is considered equivalent to the examination in the required course, and the other counts as a one-hour elective.

The examination in elective Ophthalmology will be clinical and written.

Candidates for the degree of M.D. who have served satisfactorily as Internes in the Massachusetts General Hospital, Boston City Hospital, Carney Hospital, Children's Hospital, and State Almshouse Hospital, for a period of not less than one year, may be exempt from examination in the electives of the fourth year.

No student is allowed to anticipate the examinations in the regular course of studies of his year, except by special permission of the Faculty.

After two failures to pass in any subject, a student must give notice twenty-four hours in advance, at the Dean's office, of his intention to take each subsequent examination in that subject, and pay a charge of three dollars.

DEGREES.

DEGREE OF DOCTOR OF MEDICINE.

Every candidate for the degree of Doctor of Medicine at this University must be at least twenty-one years of age, and of good moral character. He must fulfil all the requirements for admission to this Medical School; must give evidence of having studied in a recognized Medical School at least four full years, of which one year must be spent at this School; must pass all required examinations, and fulfil satisfactorily the special requirements enumerated on page 51.

The degree of Doctor of Medicine will be given to those candidates who fulfil the above requirements. The degree of Doctor of Medicine *cum laude* will be given to candidates who have obtained an average of eighty per cent., or over, in all the required examinations.

Candidates for the degree must make application for it in writing, on blanks furnished at the Dean's office, on or before May 1 of the year in which they intend to graduate.

Candidates for the degree of Doctor of Medicine are not required to present a thesis; but they may present a voluntary thesis which, if of conspicuous merit, may receive honorable mention; if the thesis is also of a suitable character, it may be read at the Commencement exercises. Theses must be completed and delivered to the Dean on or before the first day of June.

A graduate of another medical school of recognized standing may obtain the degree of Doctor of Medicine at this University by fulfilling all the requirements for undergraduates above mentioned; but he may take the examination in any subject only at the times when regularly it is held, that is, in September, at the mid-year, or in June.

DEGREE OF MASTER OF ARTS.

The degree of MASTER OF ARTS is open to graduates of the Harvard Medical School who are also Bachelors of Arts of Harvard College, and to Bachelors of Arts of other Colleges who shall be recommended by the Faculty of Arts and Sciences of Harvard College. Candidates must pursue an approved course of study in Medicine for at least one year after taking the degree of Doctor of Medicine. Applications for approval of the course of study offered for this degree must be made to the Administrative Board of the Graduate School on or before the *thirtieth day of April*. It is advisable to apply to the Board *early in the year*.

FEES AND EXPENSES.

All fees and deposits must be paid within two weeks of the beginning of the academic year; except that payment of two-fifths of the tuition fee may be deferred until January 31st, and the graduation fee may be paid not later than one day before Commencement. Each student whose dues remain unpaid on the day fixed for their payment is required at once to cease attending lectures and using laboratories or making use of any other privileges as a student until his financial relations with the University have been arranged satisfactorily to the Bursar. Failure to comply with this rule is deemed cause for final separation from the University.

The fees are:—For matriculation, *five dollars*; for instruction, for the first three years, *two hundred dollars* for each year (if in two payments, at the first, one hundred and twenty dollars; at the second, eighty dollars); for a half-year alone, *one hundred and twenty dollars*; for the full year, to all students entitled to be classified as fourth-year students and who have been regular members of the School for three full years, *one hundred dollars* (if in two payments, at the first, sixty dollars; at the second, forty dollars); for graduation, *thirty dollars*.*

During the first two years there are the following additional expenses: two dollars for each of the three parts required for dissection; two dollars for laboratory materials in Histology; three dollars for physiological material; and a maximum of ten dollars a year for chemical material, in addition to the charge for breakage of glass apparatus. Students are required to deposit with the Bursar† six dollars to cover Anatomy charges, two dollars for Histology, and twenty dollars for Chemistry and Physiology. The balances of these deposits are returnable at the end of the year.

A deposit of two dollars with the Dean will entitle a student to the use of a locker in the School building.

A student who wishes to rent a microscope of the School can do so upon payment of three to six dollars a half-year.

In the fourth year a charge of three dollars is made for material used in the course in Operative Surgery.

Every student is required to file a bond of *fifty dollars*, executed by two sufficient bondsmen (one of whom must be a citizen of the United States), or to deposit fifty dollars in money, to cover the loss or injury of any property belonging to the University, or for which it is responsible. Blank forms of bonds may be obtained from the Secretary of the Faculty

* Students entering the School after the academic year 1902-03 shall pay a fee of \$200 for the fourth year and be exempt from a graduation fee.

† The Bursar's office is in Dane Hall, Harvard Square, Cambridge. Hours 9-1.

or from the Bursar. No officer or student of the University is accepted as a bondsman. Students will be held responsible for the payment of fees until they have notified the Dean, in writing, of their intention to withdraw from the School.

Whenever a student is obliged to withdraw from the School before the last four weeks of a half-year, for no misdemeanor, but for good and sufficient reason, to be determined in all cases by the Administrative Board, it shall be recommended that he be entitled to a remission of three-fourths of the amount due for that portion of the time during which he receives no instruction. This remission will date from the reception by the Dean of a written notice of the student's withdrawal from the School.

No degree will be conferred till all dues to the School are discharged.

The student's general expenses may be reduced, in accordance with his means, to the standard which prevails in other cities. A list of boarding places, at various prices, can be obtained at the rooms of the Young Men's Christian Association, corner of Berkeley and Boylston Streets, and the rooms of the Young Men's Christian Union, No. 48 Boylston Street, Boston.

Infirmary Fee.

Not later than October 10 in each academic year, any student may pay to the Bursar the sum of four dollars for the maintenance of the Stillman Infirmary; and, on the order of a physician, every student who has taken advantage of this opportunity will be given, in case of sickness, in return for the fee, a bed in a ward, board, and ordinary nursing for a period not exceeding two weeks in any one academic year.

CLINICAL ADVANTAGES.

The Medical Department of the University is established in Boston, in order to secure for Anatomy, Pathology, and the various Clinical Subjects those advantages which are found only in large cities.

There are Hospital visits or operations daily.

The Massachusetts General Hospital. — During the past year, more than five thousand patients were treated in the wards, and over thirty thousand in the out-patient departments. Patients are received from all parts of the United States and the Provinces, and are visited by the students, with the attending physicians and surgeons, on four days in the week. Operations are numerous, and are performed in the amphitheatre, which is provided with seats for 400 persons. Clinics in the following special branches have been established in connection with the out-patient department: Dermatology, Laryngology, Diseases of the Nervous System, and Ophthalmology. The Dalton scholarship of \$500 is open to the house pupils.

The Boston City Hospital. — During the past year, about nine thousand cases were treated in its wards, and twenty-two thousand in its various out-patient departments. The medical wards always contain many cases of acute diseases, and changes are taking place constantly. The opportunities for seeing fractures, injuries, and traumatic cases of all kinds are excellent, since, on an average, eight hundred street accidents are treated yearly. Surgical operations are performed in the amphitheatre. There are special services for diseases of women, of the eye, the ear, the skin, and the nose and throat. Diseases of women and of the nervous system are also largely treated in the out-patient department. Clinical instruction is given by the physicians and surgeons two or more times a week.

In these two hospitals the facilities for witnessing Operative Surgery are unsurpassed. Twice a week operations are performed in the presence of the class. The number of these operations is large, reaching nearly two thousand a year. The variety is great, embracing every surgical disease and injury, including the surgical operations on the eye and ear.

The Boston Lying-in Hospital. — More than six hundred patients were confined during the last year in the Hospital. In the out-patient department over sixteen hundred cases were attended by the hospital Externes, who are appointed from the third and fourth year students. Clinical instruction is given in these cases by the physicians to out-patients and by the house physicians.

The Boston Dispensary. — More than forty thousand patients were treated at this public charity during the past year. Students have ample and excellent opportunity for seeing practical work in the diagnosis and treatment of cases illustrating the various branches of Medicine and Surgery.

The Infants' Hospital. — The wards of the Hospital are devoted entirely to children under two years of age. About three thousand children of all ages are treated annually in the out-patient department. The material of the Hospital is used throughout the year for teaching both students and graduates.

Children's Hospital. — During the past year more than seven hundred cases were treated in the wards and about seventy-six hundred in the out-patient departments. Instruction in orthopedic surgery and in the general diseases of children is given by members of the hospital staff.

The Massachusetts Charitable Eye and Ear Infirmary. — Over thirty thousand patients were treated at this institution during the past year. These cases present every variety of disease of the ear and eye, and supply a large number of operations. A new and enlarged hospital, considered to be one of the best of its kind in the world, has been erected on land adjoining the Massachusetts General Hospital. It is

believed that this building will provide adequately for the proper treatment of the constantly increasing number of patients.

Long Island Hospital, Boston Harbor.—This Hospital is designed particularly for the treatment of chronic diseases. It has two hundred and fifty beds, with an average daily number of patients of about two hundred and thirty. It has marked advantages for the study of syphilis, tuberculosis, diseases of the nervous system, and chronic diseases of the heart and of the kidneys. The number of autopsies is annually about 50 per cent. of the deaths, a fact which affords an unusual opportunity for the study of pathological anatomy. The material in the Hospital is used for clinical instruction by the members of the Visiting Staff.

Students are also permitted to visit the Free Hospital for Women and the Carney Hospital on application to the physicians on duty.

There are more than sixty appointments annually for Internes in the various hospitals, and nearly as many more for Assistants in the out-patient departments. Appointments for the Massachusetts General and Boston City Hospitals are for terms of one to two years (according to the service chosen); for the Boston Lying-in Hospital for six months; and for the Free Hospital for Women for nine months.

WARREN ANATOMICAL MUSEUM.

The Warren Anatomical Museum was founded in 1847 by JOHN COLLINS WARREN, of the College Class of 1797, Adjunct Professor of Anatomy and Surgery from 1809 to 1815, Hersey Professor of Anatomy and Surgery from 1815 to 1847, Professor *Emeritus* from 1847 to his death in 1856, son to JOHN WARREN, the first Hersey Professor of Anatomy and Surgery. This important Museum is open to students in the School, and its collections are used in demonstration of the lectures. Its Curator is Dr. WILLIAM FISKE WHITNEY.

The collection has about nine thousand specimens, illustrating both normal and pathological anatomy and materia medica. Students may have access to these specimens at any time upon application to the Curator.

Besides dissections and serial sections of many bones, the anatomical collection includes many corrosion preparations, plaster and papier maché models of bones, organs, and various parts of the body, and frozen sections.

The pathological collection is being constantly enlarged by the addition of numerous specimens, preserved in their natural colors by Kaiserling's method.

LIBRARIES.

Medical School students who are engaged in research work have access to the special libraries of the various departments on application to the persons in charge.

The College Library at Cambridge is open to the students of this School.

The Boston Public Library, which contains a large collection of medical books, is open to students who are inhabitants of Boston. Students, not inhabitants of Boston, who have filed a bond at the Bursar's office, or deposited with the Bursar the sum of fifty dollars, may also use this library. The Bursar will furnish on application the necessary certificate of bond or deposit.

The Boston Medical Library has nearly 35,000 volumes, about half of which are periodicals, and 30,000 pamphlets. Nearly 500 current journals and transactions are on file. There is a good reference library of modern books, including encyclopaedias, systems, etc. The Library is open daily, except Sundays and holidays, from 9 A.M. to 6 P.M. It is also open Tuesday and Friday evenings from 7 to 10, except during July and August. It has always been free to medical students.

FELLOWSHIPS AND SCHOLARSHIPS.

FELLOWSHIPS.

BULLARD FELLOWSHIPS. In 1891, WILLIAM STORY BULLARD, of Boston, gave the sum of fifteen thousand dollars for the establishment of three fellowships of five thousand dollars each "in memory of three physicians who were distinguished for their honorable personal character and for their professional services in this community." Accordingly the three following fellowships were established with a yearly income of two hundred and twenty-five dollars each:—

THE GEORGE CHEYNE SHATTUCK MEMORIAL FELLOWSHIP.

THE JOHN WARE MEMORIAL FELLOWSHIP.

THE CHARLES ELIOT WARE MEMORIAL FELLOWSHIP.

The income from any one or all of these fellowships may be paid to any student or member of the medical profession who shall be selected by the Administrative Board of the Medical School to make such original investigations in Medical Science as in their opinion will be most useful to the profession and to the community. The results of such investigations shall not, however, be published as a research performed under the grant of a Bullard Fellowship, unless the work shall have received the approval of the Committee. If published with the approval of the Committee, mention shall be made of the fact that the work was done under a Bullard Fellowship.

Holders of Bullard Fellowships are required to do an amount of work equivalent to not less than ten hours a week throughout the academic year and to present to the Committee at the end of the academic year a report on the amount and result of the work performed.

Applications for the Bullard Fellowships must be handed to the Dean on or before October 1:

AUSTIN FELLOWSHIPS. In 1900, four teaching fellowships, of five hundred dollars each, were established from the income of the Austin Fund.

PROCTOR FUND. A bequest of fifty thousand dollars by Ellen Osborne Proctor for the purpose of promoting the study of chronic diseases. The income of this fund is to be devoted to the care in hospital of persons afflicted with chronic disease, and to investigations into the nature and treatment of the same. The special disposition of the income of this fund is under the control of the heads of the departments of Theory and Practice of Physic, Clinical Medicine, and Pathology.

SCHOLARSHIPS.

The Cheever Scholarship is awarded to a student of the first year class. The Hayden Scholarship may be so awarded. All the other Scholarships are awarded to members of the three upper classes.

BARRINGER SCHOLARSHIPS. Two, known as the Edward M. Barringer Scholarship No. 1, and the Edward M. Barringer Scholarship No. 2, and having a yearly income of three hundred dollars and two hundred dollars respectively, from a bequest of Edward M. Barringer, will be awarded to deserving students, preferably those of the fourth class.

DAVID WILLIAMS CHEEVER SCHOLARSHIP, with an income of two hundred and fifty dollars, was founded in 1889 by David Williams Cheever, M.D., LL.D., of Boston, of the Class of 1852. It is to be awarded to a poor and meritorious student of the first year, after three months' probation in the Medical School.

ISAAC SWEETSER SCHOLARSHIP was founded in 1892 by Mrs. Anne M. Sweetser. The income of two hundred and fifty dollars is to be "devoted to the aid of poor students of ability who would not otherwise be able to continue the studies necessary for their profession."

CLAUDIUS M. JONES SCHOLARSHIP, with an income of two hundred and fifty dollars, is from a bequest of six thousand dollars by Claudius Marcellus Jones, of the Class of 1866, M.D. 1875.

ORLANDO W. DOE SCHOLARSHIP. The bequest of ORLANDO WITHERSPOON DOE (A.B. 1865, M.D. 1869) was five thousand dollars. One half of the income derived therefrom, amounting to one hundred dollars, "is to be given annually as a scholarship to a deserving student in the Medical department."

CHARLES PRATT STRONG SCHOLARSHIP, with an income of one hundred dollars, was founded in 1894 by friends and patients of the late Charles Pratt Strong, of the Class of 1876, M.D. 1881.

The LEWIS AND HARRIET HAYDEN SCHOLARSHIP for colored students was founded in 1894 from a bequest of Mrs. Harriet Hayden. The income is two hundred dollars.

ALFRED HOSMER LINDER SCHOLARSHIP, with an income of two hundred dollars, was founded in 1895 by Mrs. George Linder. It is to be awarded to a needy student who shall have proven himself to be of sound principles and marked ability.

JOSEPH EVELETH SCHOLARSHIPS. Three Scholarships with an annual income of two hundred dollars each. Founded from the residuary bequest of thirty-seven thousand eight hundred and ninety-seven dollars and fourteen cents, made by Joseph Eveleth, of Boston, "for aiding deserving and indigent young men in obtaining an education in said College or any of the schools connected therewith." Three Scholarships on this foundation have been assigned to the Harvard Medical School.

EDWARD WIGGLESWORTH SCHOLARSHIP, with an income of two hundred dollars, was founded in 1897 by the family of the late Edward Wigglesworth, of the Class of 1861, M.D. 1865, the yearly income of the fund to be paid to such needy and deserving students of the Medical School as the Medical Faculty shall annually recommend.

HILTON SCHOLARSHIPS. Two Scholarships, with an income of two hundred and twenty-five dollars each, were founded in 1897 from a bequest of William Hilton.

CHARLES B. PORTER SCHOLARSHIP, with an income of two hundred dollars, was founded in 1897 from a bequest of five thousand dollars by William L. Chase.

The JOHN THOMSON TAYLOR SCHOLARSHIP, with an income of two hundred dollars, was founded in 1899 by Mrs. Frederic D. Philip in memory of her brother, John Thomson Taylor, who died in 1889. He was a student of the Medical School from 1887 to 1889.

LUCIUS F. BILLINGS SCHOLARSHIP, with an income of two hundred dollars, was founded in 1900 from a bequest under the will of Lucius F. Billings.

The JOSEPH PEARSON OLIVER SCHOLARSHIP, with an income of three hundred and twenty-five dollars, was founded in 1904 by patients of the late Joseph Pearson Oliver, M.D. (Harvard, 1871), to be awarded "to such needy and deserving student of the Medical School as the Administrative Board shall annually recommend."

COTTING GIFT. The income of a fund received from the late Dr. Benjamin E. Cotting will be given to such medical student or students as the Medical Faculty may select, having regard to the pecuniary needs, intellectual capacity, faithfulness and earnest endeavor, rather than to highest scholarship merely. The amount to be awarded annually will be one hundred and twenty-five dollars.

The income of the **JOHN FOSTER FUND**, amounting to about one hundred and fifty dollars, is payable every other year to one or more meritorious students needing assistance. The next payment will be made in 1904.

All applications for scholarships or pecuniary aid, except for the Cheever and Hayden Scholarships, must be handed to the Dean on or before *June 1*.

Applications for the Cheever and Hayden Scholarships must be handed to the Dean on or before *November 30*. These scholarships are open only to students who are members of the school at the time of application.

Blank forms, on which all applications for pecuniary aid must be made, may be obtained of the Dean.

PRIZES.

Boylston Medical Prizes.—These prizes, which are open to public competition, are offered annually for the best dissertations on questions in medical science proposed by the Boylston Medical Committee.

At the annual meeting held in Boston in 1904 no prize was awarded.

For 1905 two prizes are offered :—

1. A prize of seventy-five dollars for the best dissertation on *The results of Original Work in Anatomy, Physiology, or Physiological Chemistry*. The subject to be chosen by the writer.

2. A prize of seventy-five dollars for the best dissertation on *The results of Original Investigations in Pathology, Bacteriology, Therapeutics, or Pharmacology*. The subject to be chosen by the writer.

Dissertations on these subjects must be sent post-paid to H. C. ERNST, M.D., Harvard Medical School, Boston, Mass., on or before *January 1, 1905*.

For 1906 two prizes are offered :—

1. A prize of seventy-five dollars for the best dissertation on *The results of Original Work in Anatomy, Physiology, or Physiological Chemistry*. The subject to be chosen by the writer.

2. A prize of seventy-five dollars for the best dissertation on *The results of Original Investigations in Pathology, Bacteriology, Therapeutics, or Pharmacology*. The subject to be chosen by the writer.

Dissertations on these subjects must be sent to the same address as above on or before *January 1, 1906*.

In awarding these prizes preference will be given to dissertations which exhibit original work, but if no dissertation is considered worthy of a prize, the award may be withheld.

Each dissertation must bear in place of its author's name some sentence or device, and must be accompanied by a sealed packet bearing the same sentence or device, and containing within the author's name and residence. *Any clew by which the authorship of a dissertation is made known to the Committee will debar such dissertation from competition.*

Dissertations must be printed or typewritten, and their pages must be bound in book form.

All unsuccessful dissertations are deposited with the Secretary, from whom they may be obtained, with the sealed packet unopened, if called for within one year after they have been received.

By an order adopted in 1826, the Secretary was directed to publish annually the following votes :—

1. That the Board do not consider themselves as approving the doctrines contained in any of the dissertations to which premiums may be adjudged.
2. That in case of publication of a successful dissertation, the author be considered as bound to print the above vote in connection therewith.

The Boylston Medical Committee is appointed by the President and Fellows, and consists of the following physicians: WILLIAM F. WHITNEY, M.D., *President*; HAROLD C. ERNST, M.D., *Secretary*; FRANZ PFAFF, M.D., THEOBALD SMITH, M.D., WILLIAM T. PORTER, M.D., FRANKLIN DEXTER, M.D., EDWARD H. NICHOLS, M.D.

The address of the *Secretary* of the Boylston Medical Committee is HAROLD C. ERNST, M.D., Harvard Medical School, Boston, Mass.

William H. Thorndike Prize.—A prize of two hundred dollars will be given annually to the author of the best essay on some subject in any branch of Surgery.

The students of the Harvard Medical School and graduates of under five years' standing of any recognized medical school are eligible in competition for this prize.

Each essay must bear in place of its author's name some sentence or device, and must be accompanied by a sealed packet bearing the same sentence or device, and containing within the author's name and residence. If the author is a graduate, it must also contain the date of his graduation in medicine and the medical school from which he was graduated. Any clew by which the authorship of an essay is made known to the judges will debar such essay from the competition.

The essays must be sent to the Dean of the Harvard Medical School, 688 Boylston Street, Boston, Mass., U. S. America, on or before November 1 of each year, and the award will be made annually on December 24. If no essay is considered worthy of a prize, no award will be made.

Otological Prize.—For the best preparation illustrating the osseous anatomy of the ear or for the best thesis showing original work on an otological subject, a prize of twenty-five dollars is offered, open to fourth-year students.

Other Prizes.—The Bowdoin, Dante, Toppan and Sumner Prizes, offered by the Faculty of Arts and Sciences, are open to students in all departments of the University. Full particulars in regard to these prizes may be found in the University Catalogue.

COURSES OF STUDY FOR GRADUATES.

The Faculty has arranged, for graduates of recognized medical schools, an improved plan of instruction, embracing nearly all the branches of practical and scientific medicine. It is designed to supply good opportunities for clinical and laboratory study.

The laboratories of the School are well equipped for practical work, and the clinical advantages offered by the hospitals of Boston furnish abundant material for all purposes of instruction. The following are the principal institutions:—

Massachusetts General Hospital,	Infants' Hospital,
Boston City Hospital,	Children's Hospital,
Boston Dispensary,	McLean Hospital (for the Insane),
Massachusetts Eye and Ear Infirmary,	Carney Hospital.
Boston Lying-in Hospital,	

Instructors in the Medical School are members of the medical and surgical staffs of these institutions, to all of which students are admitted under their immediate supervision.

Instruction in the graduate courses is, with but few exceptions, entirely distinct from that of the undergraduate department of the School; but students of the former are admitted also to all the regular lectures (not clinical) of the latter, without extra charge, during their connection with the School.

Instruction is conducted in small classes and under the personal direction of the heads of departments.

Instruction is given throughout the academic year, October to June.

A certificate of attendance will be furnished, if desired.

FEES.

The fees for the separate courses in the several departments vary from \$5 to \$125.

An extra fee is required for the use of material in laboratory, dissecting, and operative courses.

Graduates seeking admission to any of the graduate courses must first register their names at the Dean's office at the Medical School, where all fees are payable, and obtain a receipt to be shown at the first exercise.

For further information and full description of the courses and lectures for graduates, address Dr. WILLIAM L. RICHARDSON, *Dean*, Harvard Medical School, 688 Boylston Street, Boston, Mass.

SUMMER COURSES OF INSTRUCTION.

During the summer of 1904, courses in many branches of practical and scientific medicine will be given by teachers in the School. These courses will be clinical in character and will be given at the Hospitals and Dispensaries by the physicians and surgeons on duty. Practical instruction will also be given in several of the Laboratories of the School by the instructors in charge. These courses are open only to graduate and undergraduate students of medical schools recognized by the Faculty of Medicine, and to such others as the Dean of the Faculty approves.

A list of the Summer Courses will be announced early in the Spring. For further information address Dr. WILLIAM L. RICHARDSON, *Dean*, Harvard Medical School, 688 Boylston Street, Boston, Mass.

The following are the Courses provided in the Graduate Department for 1904-05.

SUBJECT.	INSTRUCTOR.	PLACE.	TIME.*	FEE.
1. Anatomy of the Joints	Prof. Dwight	Medical School	Special	\$25.
2. Dissection Courses	Dr. J. Warren	"	After Nov. 1	20.
3. Special Anatom. Instruction	Prof. Dwight	"	Special	Special.
4. Anatomy of Nose and Throat	Dr. Mosher	"	Special	15.
5. Genito-Urinary Anatomy, Male	Dr. Whiteside	"	After Feb. 1	25.
6. Genito-Urinary Anatomy, Female	Dr. Wadsworth	"	After Feb. 1	20.
7. Histology and Microscopy	Dr. F. T. Lewis	"	Feb.	25.
8. Elem. Human Embryology	Drs. Bremer and Lewis	"	Feb.—June	25.
9. Advanced Embryology	Prof. Minot, Drs. Bremer and Lewis	"	Feb.—June	75.
10. Special Physiological Instruction	Prof. W. T. Porter and Cannon	"	Special	Special.
†11. Research in Physiology	Prof. W. T. Porter and Cannon	"	Special	Special.
†12. Phys. and Path. Chemistry	Prof. Wood	"	Special	Special.
†13. Clinical Examination of Urine	Prof. Wood and Dr. Emerson	"	Special	30.
†14. Clinical Haematology and Examination of Gastric Contents	Dr. Hewes	Med. Sch. & Mass. Gen. H.	Oct.—Jan.	30.
†15. Toxicology and Medico-Legal Examination of Blood	Prof. Wood	Medical School	Special	Special.
†16. Research in Physiological and Pathological Chemistry	Prof. Wood	"	Special	Special.
†17. Research and General Laboratory Work in Bacteriology	Prof. Ernst	"	Special	25.
18. Research and General Laboratory Work in Pathology	Prof. Councilman and Mallory, and Dr. Wright	Med. Sch., Boston City & Mass. General Hospitals	Special	30-50.
19. Neuropathology	Dr. Southard	Med. Sch. & Boston City H.	Special	30-50.
20. Pathological Anatomy	Dr. Magrath	Medical School	Feb. 15—Mar.	30.
21. Diagnosis of New Growths	Dr. Whitney	Mass. General Hospital	Special	15.
22. Research in Comparative Pathology	Prof. Smith	Bussey Institution	Special	Special.
†23, †24. Clinical Medicine and Pathological Demonstrations	Prof. Sears and Dr. Pratt	Boston City Hospital	Mar., Apr.	25.
†25. Clinical Medicine	Dr. Vickery	Mass. General Hospital	Oct.	15.
†26. Clinical Medicine	Dr. A. K. Stone	"	Nov. & Dec.	25.
†27, †28, †29. Clinical Medicine	Dr. J. M. Jackson	"	Nov.—Jan.	15.
†30. Clinical Medicine	Dr. R. C. Cabot	"	May	30.
†31. Clinical Medicine	Dr. Denny	Boston Dispensary	June	15.
†32, †33. Clinical Medicine	Dr. Robey	Boston City Hospital	Feb.—May	20.

†34. Locke	Dr. Locke	“ “ “	Nov., Dec.	25.
†35. Clinical Medicine	Dr. A. K. Stone	Mass. General Hospital	Jan., Feb.	25.
†36. Diseases of the Lungs	Dr. R. C. Cabot	“ “ “	Mar., June	30.
†37. Diseases of the Chest	Dr. F. W. White	Boston City Hospital	Oct., Nov.	12.
†38. Diseases of the Chest	Dr. A. K. Stone	Mass. General Hospital	Jan., Feb.	25.
†39. Diseases of the Myocardium	Dr. Pratt	“ “ “	Jan.	15.
†40. Diseases of the Myocardium	Dr. Hewes	“ “ “	Oct., Nov.	30.
†41. Digestive Diseases	Dr. Joslin	Boston City Hospital	Mar., May	12.
†42. Digestive Diseases	Dr. F. W. White	“ “ “	Dec., Jan.	12.
†43. Digestive Diseases	Dr. Joslin	Samaritan Hospital	Oct.—Dec.	12.
†44. Constitutional and Chronic Diseases	Dr. Locke	Long Island Hospital	Jan.—Mar.	25.
†45. Infectious Diseases (see Pediatrics)				
†46. Blood Examination	Dr. R. C. Cabot	Mass. General Hospital	Apr.	30.
†47. Methods of Clinical Diagnosis	Dr. Hewes	“ “ “	Oct., Nov.	30.
†48. Sputum Analysis	Dr. W. H. Smith	“ “ “	Nov.—Jan.	30.
†49. Blood, Urine, and Sputa	Dr. Lord	“ “ “	Mar.—June	30.
†50. Blood, Urine, and Sputa	Dr. Musgrave	“ “ “	Dec., Jan., Mar.	10.
†51. Cytodiagnosis	Prof. Fitz	“ “ “	Nov.—Feb.	20.
†52. Ward Work	Prof. Sears	Boston City Hospital	Mar., May	20.
†53. Medical Out-Patient Work	Drs. Jackson, Stone, R. C. Cabot, Smith, White, Locke, Robey, and Joslin	Mass. General Hospital	Nov.—June	30.
†54. Therapeutics	Prof. Shattuck	“ “ “	Nov.—June	Special.
†55. Therapeutics	Prof. Address	Med. Sch. & Boston City H.	Oct.—June	Special.
†56. Research and special work in Surg.	Staffs of Hospitals	Med. Sch. & Hospital Labs.	Special	Special.
†57. General Surgical Course	Dr. Blake	Boston City Hospital	Oct.—June	50.
†58. Major Surgery, 2 courses	Dr. Brewster	Mass. General Hospital	Feb.—May	25.
†59. Minor Surgery, 2 courses	Dr. Brown	Children's Hospital	Feb.—May	25.
†60. Surgical Diagnostic Radiology	Dr. Brown	Carney Hospital	Oct.—Apr.	20.
†61. Surgical Diagnostic Radiology	Prof. Burrell, Drs. H. W. Cushing and J. S. Stone	Children's Hospital	Oct.—Apr.	15.
†62. General Surgery of Children	Dr. F. Cobb	Mass. General Hospital	Oct.—June	50.
†63. Clin. and Oper. Surgery, 2 courses	Dr. Codman	“ “ “	Oct.—Jan.	30.
†64. The X-ray in Surgery	Dr. Cotton	“ “ “	Feb.—May	20.
†65. Fractures	Dr. Craudon	Boston City Hospital	Oct. 1—Nov. 15	30.
†66. Pathology of the Prostate	Dr. Greenough	“ “ “	Special	25.
†67. Surgical Pathology	Dr. Hubbard	Mass. General Hospital	Special, Feb.—Apr.	25.
†68. Clin. and Oper. Minor Surgery	Dr. Jones	Boston City Hospital	Oct. 1—Jan.	20.
†69. Minor Surgery		Mass. General Hospital	Oct. 1—Jan.	20.

* Time includes months named. When time and fee are “special,” arrangements must be made with the instructor.

† Women admitted conditionally.

SUBJECT.	INSTRUCTOR.	PLACE.	TIME.*	FEE.
83. Genito-Urinary Surgery	Dr. Lund	Boston City Hospital	Feb., Mar.	20.
†84. Minor Surgery	Dr. Lund	" "	Apr., May	20.
85. Major Surgery	Dr. Munford	Mass. General Hospital	Feb.—May	30.
86. General Surgery	Dr. Munro	Carney Hospital	Oct.—June	25.
87. After-Treatment of Surg. Patients	Dr. C. A. Porter	" "	Oct.—May	25.
88. Surgical Diagnosis	Dr. C. A. Porter	Mass. General Hospital	Oct.—May	25.
†89. Genito-Urinary Surgery, 2 courses	Dr. Paul Thorndike	Boston City Hospital	Feb.—May	15.
90. Genito-Urinary Surgery, 2 courses	Dr. Watson	" "	Oct.—Dec.	25.
91. Genito-Urinary Surgery and Venereal Diseases, 2 courses	Dr. Whiteside	Boston Dispensary	Jan., Feb.	15.
92. Cystoscopy & Cryoscopy, 2 courses	Dr. Whiteside	" "	Jan., Feb.	50.
†93. Clinical Bacteriology	Dr. Wright	Lab. Mass. Gen. Hospital	Special	30.
†94. Histological Diagnosis	Dr. Wright	" "	Special	30.
95. General Orthopedic Surgery	Prof. Bradford, Drs. Lovett, Brackett, Goldthwait, and Dane	Oct.—May	50.	
96. Tubercular Disease of Joints		Oct.—May, Special	15.	
97. Non-Tubercular Dis. of Joints		Oct.—May	15.	
98. Lateral Curvature		Oct.—May	15.	
99. Deformities	Address Prof. Bradford	Oct.—May	Special.	
100. Pathol. of Bone and Skiography		Feb.—Apr.	25.	
101. Research in Orthopedic Surgery		Nov.	25.	
102. Clinical Obstetrics		Oct.	25.	
103. Clinical Obstetrics	Dr. Friedman	Special	25.	
104. Clinical Obstetrics	Prof. C. M. Green	Special	25.	
105. Operative Obstetrics	Dr. Newell	Special	25.	
106. Operative Obstetrics	Dr. Swan	Special	25.	
107. Operative Obstetrics	Drs. Newell, Swain, Friedman, Torbert	Oct.—May	25.	
108. Clinical Obstetric Service		Oct.—May	25.	
109. Gynaecology	Prof. C. M. Green	Oct.—Jan.	25.	
110. Gynaecology	Dr. Storer	Jan.—Mar.	25.	
111. Gynaecology	Dr. Storer	Oct.—Dec.	25.	
112. Gynaecology	Dr. Friedman	Nov.—Jan.	25.	
113. Clin. and Oper. Gynaecology	Dr. Newell	Feb., Mar.	25.	
114. Operative Gynaecology	Prof. Davenport	Special	25.	
†115. Contagious Diseases	Prof. McCollom	Oct., Nov.	25.	
†116. Intubation	Prof. McCollom	Special	25.	
†117. Pediatrics	Dr. Craigin	Oct. 6—Nov. 12	20.	
†118. Pediatrics	Dr. Dunn	Nov. 17—Dec. 24	20.	

†119. Pediatrics, 2 courses	Dr. Ladd	Infants' Hospital	{	Jan. 3—Feb. 9,	20.
†120. Pediatrics	Dr. Morse	"	{	Feb. 14—Mar. 23	20.
†121. Dermatology	Prof. Bowen	Mass. General Hospital	{	Apr. 5—May 19	25.
122. Advanced Dermatology	Prof. Bowen and Dr. White	"	{	Oct.—June	50.
123. Syphilis	Dr. Post	Boston Dispensary	{	Apr.—May	25.
†124. Advanced Clinical Neurology	Prof. Putnam, Drs. Walton, Taylor, and Waterman	Mass. General Hospital	{	Oct.—June	15.
125. Surgical Neurology	Dr. Knapp	Boston City Hospital	{	Feb.—May	15.
†126. Normal Anat. of Nervous System	Dr. Walton	Mass. General Hospital	{	Mar., Apr.	15.
†127. Path. Anat. of Nervous System	Dr. Taylor	Medical School	{	Special	25.
†128. Advanced General Neurology	Dr. Taylor	"	{	Special	25.
†129. Clinical Neurology	Dr. Taylor	Med. Sch., Mass. Gen. & Long Island Hospitals	{	Special	50-75.
†130. Psychiatry	Drs. Taylor and Waterman	Mass. General Hospital	{	Oct.—May	20.
†131. Otology	Dr. Cowles	McLean Hospital	{	Special	25.
†132. Anatomy of the Ear	Dr. Hammond	Eye and Ear Infirmary	{	Nov.—Jan.	25.
133. Ophthalmology	Dr. Hammond	Medical School	{	Special	25.
134. Ophthalmology	Dr. Jack	Eye and Ear Infirmary	{	Oct., Nov.	25.
135. Ophthalmology	Dr. Quackenboss	"	{	Oct., Nov.	25.
136. Ophthalmology	Dr. Spalding	"	{	Special	Special.
†137. Oper. Laryngology and Rhinology	Dr. Clap	"	{	Special	Special.
†138. Rhinology and Laryngology	Dr. DeBiosis	Boston City Hospital	{	Dec. 26—Jan.	20.
†139. Rhinology and Laryngology	Dr. F. C. Cobb	"	{	Nov., Dec.	20.
†140. Hygiene, general	Dr. A. Coolidge	"	{	Feb., Mar.	35.
†141. Hygiene, special courses	Prof. Harrington	Medical School	{	Special	20.
†142. Research in Pharmacology	Prof. Pfaff and Dr. Vejux-Tyrode	"	{	Special	Special.

* Time includes months named. When time and fee are "special," arrangements must be made with the instructor.
† Women admitted conditionally.

SUMMER COURSES OF INSTRUCTION IN THE MEDICAL SCHOOL. 1904.

No.	Subject	Instructor	Place	No. of Exer- cises	Begins	Ends	Days	Hour	Fee
1	Elementary Anatomy	Dr. E. Taylor	Medical School	22	July 1	July 30	Mo. Tu. W. T. F.	10-1	\$20
2	Anatomy of Nose and Throat	Dr. Mosher	Medical School	6	..	..	Special	..	15
3	Anat. of male genito-urinary organs	Dr. Whiteside	Medical School	5	July	..	Special	..	25
4	An. of female genito-urinary organs	Dr. Wadsworth	Medical School	5	July	Aug.	Mo. Tu. W. T. F.	10-12	20
5	Histology	Dr. Lewis	Medical School	24	June 27	July 29	Mo. Tu. W. T. F.	10	20*
6	Embryology	Dr. Lewis	Medical School	24	June 27	July 29	Mo. Tu. W. T. F.	2-5	20*
7	Physiology	Prof. Porter	Medical School	30	June 29	Aug. 1	Daily	9-5	40*
8	Gen. Chem. and Qualitat. Anal.	Prof. Hills	Medical School	25	July 5	Aug. 6	Mo. Tu. W. T. F.	10-4	30*
9	Adv. Physiol. and Pathol. Chem.	Dr. Emerson	Medical School	..	..	..	Special	..	..
10	Physiological Chemistry	Dr. Emerson	Medical School	20	July 1	July 29	Mo. Tu. W. T. F.	9-4	20
11	Urinary Analysis	Dr. Emerson	Med. Sch. & Cit. Hos.	20	July 1	July 29	Mo. Tu. W. T. F.	9-4	20
12	Pathology	Prof. Mallory	City Hospital	41	July 5	Aug. 20	Daily	9-4	50
13	Pathology	Dr. Magrath	Med. Sch., Carney and L. I. Hosp.	41	July 5	Aug. 20	Daily	2	35*
14	Histological Diagnosis	Dr. Wright	Mass. Gen. Hosp.	20	Special	Special	Mo. Tu. W. T. F.	2-4	30*
15	Bacteriology	Dr. Page	Medical School	25	July 11	Aug. 12	Mo. Tu. W. T. F.	3	30*
16	Clinical Bacteriology	Dr. Wright	Mass. Gen. Hosp.	20	Special	Special	Mo. Tu. W. T. F.	2-4	30*
17	Bacteriology	Dr. Perry	Medical School	25	Aug. 15	Sept. 16	Mo. Tu. W. T. F.	3.15	30*
18	Public Health Bacteriology	Dr. Hill	.....	..	..	..	Special	..	..

19	Diag. Infect. Diseases of Animals	Dr. Frothingham	Medical School	..	..	..	Special	..	30*
20	General Medical Course	Staffs of Hospitals	.....	..	July 5	July 30	Daily	9-1	50*
21	General Medical Course	Staffs of Hospitals	.....	..	Aug. 1	Aug. 27	Daily	9-1	50*
22	Clinical Medicine	Dr. Jackson	City Hospital	20	July 2	Aug. 16	Tu. Th. S.	10	20*
23	Clinical Medicine	Dr. Vickery	Mass. Gen. Hosp.	13	July 1	July 29	Mo. We. Fr.	10-11	15
24	Clinical Medicine	Dr. Vickery	Mass. Gen. Hosp.	14	Aug. 1	Aug. 31	Mo. We. Fr.	10-11	15
25	Valvular Diseases of Heart	Dr. Stone	Mass. Gen. Hosp.	26	July 1	July 31	Daily	10-11	20*
26	Clinical Medicine	Dr. J. N. Coolidge	City Hospital	12	July 1	July 29	Mo. We. Fr.	10	15*
27	Clinical Medicine	Dr. J. N. Coolidge	City Hospital	12	Aug. 1	Aug. 26	Mo. We. Fr.	10	15*
28	Clinical Medicine	Dr. J. N. Coolidge	City Hospital	12	Sept. 5	Sept. 30	Mo. We. Fr.	10	15*
29	Lab. methods of Clinical Diagnosis	Dr. Hewes	Mass. Gen. Hosp.	18	July 1	July 31	Mo. We. Fr.	9-11	30*
30	Diabetes Mellitus	Dr. Joslin	City Hospital	6	Aug. 8	Aug. 25	Mo. Tu.	12	10*
31	Clinical Medicine	Dr. Donoghue	Dispensary	26	July 1	July 30	Daily	9-12	25*
32	Clinical Medicine	Dr. Donoghue	Dispensary	27	Aug. 1	Aug. 31	Daily	9-12	25*
33	Clinical Medicine	Dr. Donoghue	Dispensary	26	Sept. 1	Sept. 30	Daily	9-12	25*
34	Clinical Medicine	Dr. Pratt	Mass. Gen. Hosp.	26	July 1	July 31	Daily	9-12	30*
35	Clinical Medicine	Dr. Pratt	Mass. Gen. Hosp.	26	Aug. 1	Aug. 31	Daily	9-12	30*
36	Clinical Medicine	Dr. Locke	City Hospital	25	June 1	June 29	Daily	10	20*
37	General Surgical Course	Staffs of Hospitals	.....	..	..	..	Daily	9-4½	50*
38	Clinical and Operative Surgery	Drs. Mixter & Brewster	Mass. Gen. Hosp.	24	June 1	July 31	Daily	9-12	25*
39	Clinical and Operative Surgery	Drs. Mixter & Brewster	Mass. Gen. Hosp.	24	Aug. 1	Sept. 30	Daily	9-12	25*
40	General Surgery	Dr. Munro	Carney Hospital	26	..	..	Daily	9-12	25

No.	Subject	Instructor	Place	No. of Exer- cises	Begins	Ends	Days	Hour	Fee
41	Major Surgery	Dr. J. B. Blake	City Hospital	12	June 2	June 30	Tu. Th. Sat.	10-12	\$20
42	Major Surgery	Dr. J. B. Blake	City Hospital	12	July 2	July 31	Tu. Th. Sat.	10-12	20
43	Clinical Surgery	Dr. Lothrop	City Hospital	27	Aug. 1	Aug. 31	Daily	10-12	25*
44	Out-patient and Minor Surgery	Dr. Cobb	Mass. Gen. Hosp.	26	July 1	Aug. 1	Daily	10-12	15
45	Out-patient and Minor Surgery	Dr. Cobb	Mass. Gen. Hosp.	26	Aug. 1	Aug. 31	Daily	10-12	15
46	Minor Surgery	Dr. Greenough	Mass. Gen. Hosp.	26	June 1	June 30	Daily	9-12	20
47	Minor Surgery	Dr. Greenough	Mass. Gen. Hosp.	26	July 1	July 31	Daily	9-12	20
48	Minor Surgery	Dr. Greenough	Mass. Gen. Hosp.	27	Aug. 1	Aug. 31	Daily	9-12	20
49	Minor Surgery	Dr. Greenough	Mass. Gen. Hosp.	26	Sept. 1	Sept. 30	Daily	9-12	20
50	Minor Genito-Urinary Surgery	Dr. Crandon	City Hospital	26	June 1	June 30	Daily	9-12	20*
51	Minor Surgery	Dr. Crandon	City Hospital	27	July 1	July 31	Daily	9-12	20*
52	Minor Surgery	Dr. Crandon	City Hospital	27	Aug. 1	Aug. 31	Daily	9-12	20*
53	Minor Surgery	Dr. Crandon	City Hospital	27	Sept. 1	Sept. 30	Daily	9-12	20*
54	Gen. Surgery of Children	Prof. Burrell and Assts.	Children's Hosp.	36	July 1	July 31	Daily	11-12 3½-4½	50*
55	Gen. Surgery of Children	Prof. Burrell and Assts.	Children's Hosp.	36	Aug. 1	Aug. 31	Daily	11-12 3½-4½	50*
56	Gen. Surgery of Children	Prof. Burrell and Assts.	Children's Hosp.	36	Sept. 1	Sept 30	Daily	11-12 3½-4½	50*
57	Genito-Urinary Surgery	Dr. Watson	City Hospital	13	June 1	June 29	Tu. Th. Sat.	11-12	25
58	Genito-Urinary Surgery	Dr. Thorndike	City Hospital	53	July 1	Aug. 31	Daily	10	25*

59	Genito-Urinary Diseases	Dr. Whiteside	Dispensary	26	July	1 July	31 Daily	9½-12	15
60	Genito-Urinary Diseases	Dr. Whiteside	Dispensary	27	Aug.	1 Aug. 31	Daily	9½-12	15
61	Cystoscopy and Cryoscopy	Dr. Whiteside	Dispensary	27	July	1 July	31 Daily	11-1	50
62	Pathology of the Prostate	Dr. Crandon	City Hospital	. .	. .	. .	Special	. .	25
63	Orthopedic Surgery	Prof. Bradford	Children's Hosp.	12	July	1 Aug. 15	Tu. Th. Sat.	9-11	25*
64	Orthopedic Surgery	Dr. Lovett	Children's Hosp.	18	July	1 Aug. 15	Tu. Sat.	10-11 3-4½	25*
65	Orthopedic Surgery	Dr. Goldthwait	Carney and M.G.H.	12	June	1 June 27	Mo. We. Fr.	9-10½	25*
66	Orthopedic Surgery	Dr. Goldthwait	Carney and M.G.H.	12	July	1 July 29	Mo. We. Fr.	9-10½	25*
67	Orthopedic Surgery	Dr. Goldthwait	Carney and M.G.H.	12	Aug.	1 Aug. 26	Mo. We. Fr.	9-10½	25*
68	Orthopedic Surgery	Dr. Goldthwait	Carney and M.G.H.	12	Sept.	2 Sept. 28	Mo. We. Fr.	9-10½	25*
69	Orthopedic Surgery	Drs. Brackett and Dane	Children's Hosp.	12	July	1 Aug. 15	Mo. Wed.	3½	20
70	Oesophageal Surgery	Dr. Mixter	Mass. Gen. Hosp.	16	July	1 Aug. 31	Mo. Wed.	12-1	25*
71	Fractures	Dr. Cotton	City Hospital	20	June	16 Aug. 1	Tu. Th. Sat.	9-10	30
72	Fractures	Dr. Cotton	City Hospital	20	Aug.	1 Sept. 15	Tu. Th. Sat.	9-10	30
73	Diseases of the Rectum	Dr. Faulkner	City Hospital	24	July	2 July 31	Tu. Th. Sat.	9-10	15
74	Diseases of the Rectum	Dr. Faulkner	City Hospital	24	Aug.	2 Aug. 30	Tu. Th. Sat.	9-10	15
75	The X-ray in Surgery	Dr. Codman	Mass. Gen. Hosp.	12	June	1 June 29	Mo. We. Fr.	12-1	20*
76	The X-ray in Surgery	Dr. Codman	Mass. Gen. Hosp.	12	July	1 July 29	Mo. We. Fr.	12-1	20*
77	The X-ray in Surgery	Dr. Codman	Mass. Gen. Hosp.	12	Aug.	1 Aug. 26	Mo. We. Fr.	12-1	20*
78	Surgical Diagnostic Radiology	Dr. Brown	Children's Hosp.	16	June	1 June 28	Mo. Tu. We. S.	4-6	20*
79	Surgical Diagnostic Radiology	Dr. Brown	Children's Hosp.	16	July	2 July 27	Mo. Tu. We. S.	4-6	20*

No.	Subject	Instructor	Place	No. of Exer- cises	Begins	Ends	Days	Hour	Fee
80	Surgical Diagnostic Radiology	Dr. Brown	Children's Hosp.	16	Aug. 1	Aug. 27	Mo. Tu. We. S.	4-6	\$20*
81	Clinical Obstetrics	Prof. Green	Lying-in Hospital	• •	• •	• •	Special	• •	30
82	Clinical Obstetrics	Dr. Friedman	Lying-in Hospital	13	July 1	July 29	Mo. We. Fr.	11	20
83	Clinical Obstetrics	Dr. Newell	Lying-in Hospital	14	Aug. 1	Aug. 31	Mo. We. Fr.	11	20
84	Clinical Obstetrics	Dr. Swain	Lying-in Hospital	13	Sept. 2	Sept. 30	Mo. We. Fr.	11	20
85	Operative Gynaecology	Dr. Storer	Carney Hospital	12	• •	• •	• • • •	• •	25*
86	Clinical and Operative Gynaecology	Dr. Newell	City Hospital	13	July 2	July 30	Tu. Th. Sat.	9-11	25
87	Clinical and Operative Gynaecology	Dr. Newell	City Hospital	13	Aug. 2	Aug. 30	Tu. Th. Sat.	9-11	25
88	Clinical and Operative Gynaecology	Dr. Young	City Hospital	14	Sept. 1	Sept. 29	Tu. Th. Sat.	9-11	25
89	Minor Gynaecology	Dr. Friedman	City Hospital	13	July 2	July 30	Tu. Th. Sat.	9-11	20
90	Minor Gynaecology	Dr. Friedman	City Hospital	13	Aug. 2	Aug. 30	Tu. Th. Sat.	9-11	20
91	Minor Gynaecology	Dr. Friedman	City Hospital	14	Sept. 1	Sept. 29	Tu. Th. Sat.	9-11	20
92	Pediatrics	Dr. Morse	Children's Hosp.	13	Aug. 2	Aug. 30	Tu. Th. Sat.	11½	20*
93	Pediatrics	Dr. Morse	Infants' Hospital	12	June 1	June 29	Mo. We. Fr.	11½	20*
94	Pediatrics	Dr. Ladd	Children's Hosp.	12	Sept. 1	Sept. 27	Tu. Th. Sat.	11	20*
95	Pediatrics	Dr. Dunn	Infants' Hospital	12	July 1	July 27	Mo. We. Fr.	11	20*
96	Dermatology	Prof. Bowen	Mass. Gen. Hosp.	14	June 1	June 30	Mo. We. Th.	10-11	25
97	Dermatology	Dr. White	Mass. Gen. Hosp.	13	July 1	July 29	Tu. Th. Fr.	9½	20
98	Dermatology	Dr. White	Mass. Gen. Hosp.	13	Aug. 2	Aug. 29	Tu. Th. Fr.	9½	20
99	Syphilis	Dr. Post	Dispensary	18	June 1	July 15	Mo. We. Fr.	11-12½	25

100	Syphilis	Dr. Post	Dispensary	18	July 5 ¹	Aug. 31	Mo. We. Fr.	11-12 ¹	25
101	Ocular Symptoms in Gen'l Diseases	Dr. Standish	Eye and Ear Inf.	14	June 2	July 2	Tu. Th. Sat.	9	30*
102	Ophthalmology	Dr. Jack	Eye and Ear Inf.	15	. .	. .	Tu. Th. Sat.	10	30
103	Ophthalmology	Dr. Quackenboss	Eye and Ear Inf.	24	Aug. 1	Sept. 23	Mo. We. Fr.	9-12	25*
104	Ophthalmology	Dr. Spalding	Eye and Ear Inf.	12	July 1	July 29	Mo. We. Fr.	9	25*
105	Otology	Prof. Blake	Eye and Ear Inf.	12	July 1	July 27	Mo. We. Fr.	10-12	25*
106	Clinical Otology	Dr. Crockett	Eye and Ear Inf.	24	June 1	June 30	Daily	9-11	25*
107	Clinical Otology	Dr. Crockett	Eye and Ear Inf.	26	July 1	July 30	Daily	9-11	25*
108	Anatomy of the Ear	Dr. Hammond	Medical School	13	July 1	July 29	Mo. We. Fr.	9-11	25*
109	Anatomy of the Ear	Dr. Hammond	Medical School	13	Oct. 3	Oct. 31	Mo. We. Fr.	9-11	25*
110	Neurology	Dr. E. W. Taylor	H. M. S. & Long Isl.	20	July 5	Aug. 6	Tu. We. Th. S.	9 ¹ / ₂ -12 ¹ / ₂	30*
111	Anatomy of Central Nervous System	Dr. E. W. Taylor	Medical School	15	July 6	Aug. 6	Mo. We. Fr.	4	25*
112	Neurological Diagnosis	Dr. Waterman	M. G. H. & Long Isl.	4	Aug. 1	Aug. 12	Mo. Fr.	9-10	6
113	Diseases of Nose and Throat	Dr. Farlow	City Hospital	12	June 1	June 27	Mo. We. Fr.	10	20*
114	Laryngology	Dr. Clark	Mass. Gen. Hosp.	18	June 2	July 11	Tu. Th. Sat.	10	20*
115	Laryngology	Dr. Clark	Mass. Gen. Hosp.	18	July 16	Aug. 22	Mo. We. Fr.	10	20*
116	Laryngology	Dr. Clark	Mass. Gen. Hosp.	17	Aug. 24	Sept. 30	Mo. We. Fr.	10	20*
117	Laryngology	Dr. Coffin	City Hospital	18	July 1	Aug. 15	Mo. We. Fr.	10-11	20*
118	Laryngology	Dr. Coffin	City Hospital	18	Aug. 17	Sept. 30	Mo. We. Fr.	10-11	20*
119	Diseases of Nose and Throat	Dr. Mosher	Dispensary	18	July 1	Aug. 12	Mo. We. Fr.	10	20*
120	Diseases of Nose and Throat	Dr. Mosher	Dispensary	18	Aug. 15	Sept. 23	Mo. We. Fr.	10	20*
121	Hygiene	Prof. Harrington & Dr. Walker	Medical School	30	July 5	Aug. 16	M. Tu. W. Th. F.	Spe'l	50*

* Open to women.

Second Half-Year.

PHYSIOLOGY. FEBRUARY 1 TO MARCH 5.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
9-9.30	Conference. Room A.		Conference. Room A.			
9.30-9.50	Written Test. Rooms B and H.		Written Test. Rooms B and H.			
9.50-12	Laboratory Experiments. Rooms B and H.					
12-1	Recitation. In Sections. Rooms B and H.		Laboratory Experiments. Rooms B and H.		10-11	Recitation. Room A.
					11-12	Demonstration. Room A.

MARCH 7 TO MAY 21.

9-9.30	Lecture. Room A.		Lecture. Room A.		9-9.45	Discussion of Theses. Room A.
9.30-10	Conference. Room A.		Conference. Room A.			
10-10.20	Written Test. Rooms B and H.		Written Test. Rooms B and H.		10-11	Recitation. Room A.
10.20-12.15	Laboratory Experiments. Rooms B and H.		Laboratory Experiments. Rooms B and H.			
12.15-1	Recitation. In Sections. Rooms B and H.		Discussion of Theses. Room A.		11-12	Demonstration. Room A.

MAY 23 TO MAY 31.

Laboratory Experiments. Rooms B and H.

PHYSIOLOGICAL AND PATHOLOGICAL CHEMISTRY.

2-3	Lecture. Monday, Tuesday, Thursday, and Friday. Room A.
	Laboratory. Wednesday.
3-5.30	Laboratory. Daily except Saturday.

SECOND YEAR. — First Half-Year.

	OCTOBER.	NOVEMBER.	DECEMBER.	JANUARY.
9-12	Pathology. Laboratory. Daily. Section I, Room B. Section II, Room H.			Monday, Wednesday, and Friday. Surgery. Clinical Lecture. Nichols. B. C. H.
12-1	Pathology. Lectures. Daily. Room C.			Tuesday, Thursday, and Saturday. Monday, Wednesday, and Friday.
2-3	Bacteriology. Lectures. Daily except Saturdays. Room A.	Pathology of the Nervous System. Laboratory. Southard. H. M. S.		
3-4				
4-5	Bacteriology. Laboratory. Daily except Saturdays. Section I, Room B. Section II, Room H.			Daily except Saturday. Surgical Pathology. Laboratory. Nichols. H. M. S.
5-6				

Second Half-Year.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
	M. G. H.	M. G. H.	B. C. H.	M. G. H.	M. G. H.	B. C. H.
9	Clinical Medicine Clinic Vickery	Theory & Practice Clinic Cutler	Clinical Medicine Clinic Sears	Clinical Medicine Clinic Shattuck	Clinical Medicine Clinic Vickery	Clinical Medicine Clinic Jackson
10	Theory & Practice Clinic Fitz	Surgery Clinic M. H. Richardson	Surgery Clinic Lothrop	Theory & Practice Clinic Cutler	Surgery Clinic M. H. Richardson	Surgery Clinic J. B. Blake
11 12	Section Work					
2						
3	Hygiene. L. Harrington Room A	Hygiene. L. Harrington Room A	Theory & Practice. L. Fitz Room A	Theory & Practice. L. Fitz Room A	Hygiene. L. Harrington Room A	
4	Surgery. L. Warren Room C	Pharmacology. L. Pfaff Room A	Pharmacology. L. Pfaff Room A	Surgery. L. Warren Room C	Pharmacology. L. Pfaff Room A	
5	Surgical Technic 6 lectures Lothrop Room C	Surgery. L. Warren Room C			Surgery. L. Warren Room C	

THIRD YEAR. — First Half-Year.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
<i>Class Exercises</i>						
9-10	Theory and Practice Clinic Cutler, M. G. H.	Clinical Medicine Clinic Jackson, B. C. H.	Clinical Medicine Clinic Shattuck, M. G. H.	Neurology Clinic Putnam, M. G. H.	Clinical Medicine Clinic Sears, B. C. H.	Clinical Medicine Clinic Shattuck, M. G. H.
10-11	Surgery Clinic Warren M. G. H.	Clinical Surgery Clinical L. Gay or Burrell, B. C. H.	Dermatology Clinic Bowen, M. G. H.	Theory and Practice Clinic Fitz, M. G. H.	Pediatrics Clinical L. Rotch. No. Grove St.	Theory and Practice Clinic Cutler, M. G. H.
<i>Sections</i>	Section Work.					
11-1						
2-3						
3-4	Obstetrics. L. W. L. Richardson Room E	Theory and Practice L. Fitz Room E	Obstetrics Conference Green Room E	Obstetrics. L. W. L. Richardson Room E	Theory and Practice L. Fitz Room E	
4-5	Surgery. L. Warren Room C	<i>Oct., Nov.</i> Dermatology. L. Bowen Room E <i>Dec., Jan.</i> Syphilis. L. Post Room E	Surgery. L. Warren Room C	Pediatrics <i>Oct. L.</i> Rotch. Room E	Therapeutics. L. Pfaff Room E	Orthopedic Surgery L. Bradford Ch. H.
5-6		<i>Oct., Nov.</i> G. U. Surgery. L. Thorndike Room E		Surgery. R. Burrell Room C.	Obstetrics. R. Newell Room E	

Second Half-Year.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
<i>Class Exercises</i> 9-10	Neurology Clinic Putnam, M. G. H.	Clinical Medicine Clinic Withington B. C. H.	Neurology Clinic Putnam, M. G. H.	Clinical Medicine Clinic Sears, B. C. H.	Clinical Medicine Clinic Withington, B. C. H.	Clinical Medicine Clinic Shattuck, M. G. H.
10-11	Surgery. Clinic M. H. Richardson M. G. H.	Clinical Surgery Clinical L. Burrell, B. C. H.	Dermatology Clinic Bowen, M. G. H.	Clinical Surgery Clinical L. Burrell, B. C. H.	<i>Feb., Mar.</i> Pediatrics Clinical L. Morse, No. Grove St. <i>Apr., May</i> Syphilis Clinical L. Post, B. D.	Theory and Practice Clinic Fitz, M. G. H.
<i>Sections</i> 11-1	Section Work.					
2-3						
3-4	Obstetrics. L. W. L. Richardson Room E.	Otology Lecture Blake, Room A	Gynaecology L. or R. Davenport, Room E	Obstetrics. L. W. L. Richardson Room E	Gynaecology. L. Davenport Room E	Psychiatry Clinic Cowles, McL. H.
4-5	Pediatrics. R. Morse Room E	Pediatrics. L. Rotch Room E	Obstetrics Conference Green, Room E	Laryngology Lecture Coolidge, Room E	Obstetrics. R. Newell Room E	
5-6						

FOURTH YEAR. — OCTOBER.

	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
9	Clinical Medicine Prac. Therapeutics Shattuck, M. G. H.	Otology Clinic (s, 2 hrs.) Hammond, E. & E. I.		Practical Therapeutics Sears, B. C. H.		
		<i>Gynaecology</i> Clinic Green, B. C. H.		Otology Clinic (s, 2 hrs.) Hammond, E. & E. I.	<i>Gynaecology</i> Clinic Green, B. C. H.	Otology Clinic (s, 2 hrs.) Hammond, E. & E. I.
	Ophthalmology Clinic (s) Standish, E. & E. I.	Ophthalmology Clinic (s) Quackenboss E. & E. I.	Ophthalmology Clinic (s) Standish, E. & E. I.	Ophthalmology Clinic (s) Standish, E. & E. I.	Ophthalmology Clinic (s) Quackenboss E. & E. I.	Ophthalmology Clinic (s) Standish, E. & E. I.
10	Laryngology Clinic (s, 2 hrs.) DeBlois, B. C. H.	Laryngology Clinic (s, 2 hrs.) DeBlois, B. C. H.		Clinical Surgery Lecture (2 hrs.) Burrell & Blake B. C. H.	Laryngology Clinic (s, 2 hrs.) DeBlois, B. C. H.	
		<i>Dermatology</i> Clinic White, M. G. H.			<i>Dermatology</i> Clinic White, M. G. H.	
		Laryngology Clinic (s) Coolidge, M. G. H.		Laryngology Clinic (s) Coolidge, M. G. H.		Laryngology Clinic (s) Coolidge, M. G. H.
11	Ophthalmology Clinic (s) Spalding, E. & E. I.	Ophthalmology Clinic (s) Clap, E. & E. I.	Ophthalmology Clinic (s) Clap, E. & E. I.	Ophthalmology Clinic (s) Spalding, E. & E. I.		Ophthalmology Clinic (s) Clap, E. & E. I.
	Syphilis Clinic (s) Post, B. D.	Ophthalmology Clinic (s) Jack, E. & E. I.	Syphilis Clinic (s) Post, B. D.		Syphilis Clinic (s) Post, B. D.	Surgical operations M. G. H.
	<i>Neurology</i> Clinic Putnam, M. G. H.	Diagnosis in Clinical Surgery Clinic Warren & Porter M. G. H.		<i>Neurology</i> Clinical Lecture Walton, M. G. H.	Ophthalmology Clinic (s) Jack, E. & E. I. Surgical operations B. C. H.	<i>Neurology</i> Clinical Lecture Walton, M. G. H.

12	Clinical Surgery Lecture Mumford M. G. H.	Ophthalmology Lecture Standish E. & E. I.	Syphilis Lecture Post, B. D.	Genito-urin. Dis. Clin. Lecture Thorndike, B. C. H.	Ophthalmology Lecture Standish E. & E. I.	Ophthalmology Lecture Standish E. & E. I.
2	<i>Exper. Physiol.</i> Lab. (2 hrs.) W. T. Porter H. M. S.	<i>Exper. Physiol.</i> Lab. (2 hrs.) W. T. Porter H. M. S.	<i>Exper. Physiol.</i> Lab. (2 hrs.) W. T. Porter H. M. S.		<i>Exper. Physiol.</i> Lab. (2 hrs.) W. T. Porter H. M. S.	
3	Anat. of Ear R. (s) Hammond H. M. S.	Clin. Microscopy Lab. Whitney H. M. S.	Anat. of Ear R. (s) Hammond, H. M. S.	Clin. Microscopy Lab. Whitney H. M. S.	Clin. Microscopy Lab. Whitney H. M. S.	
4	Otology Lecture Blake, Room A			Otology Lecture Blake, Room A		Orthopedic Surg. Lecture Bradford H. M. S. or Ch. H.
5	Regional Surgery M. H. Richardson Room C	Operative Surgery Lecture Monks, Room D	Regional Surgery M. H. Richardson Room C	Laryngology Lecture DeBlais, Room E	Clinical Medicine Conference Room A	Operative Surgery Lecture Monks, Room D

(s) Section of the class.

Electives are in *italics*.

NOVEMBER.

	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
9	Clinical Medicine Prac. Therapeutics Shattuck, M. G. H.	Otology Clinic (s, 2 hrs.) Hammond, E. & E. I.		Practical Therapeutics Sears, B. C. H.	<i>Gynaecology</i> Clinic Green, B. C. H.	
						Otology Clinic (s, 2 hrs.) Hammond, E. & E. I.
		<i>Gynaecology</i> Clinic Green, B. C. H.	Otology Clinic (s, 2 hrs.) Hammond, E. & E. I.			Ophthalmology Clinic (s) Standish, E. & E. I.
10	Ophthalmology Clinic (s) Standish, E. & E. I.	Ophthalmology Clinic (s) Quackenboss E. & E. I.	Ophthalmology Clinic (s) Standish, E. & E. I.	Ophthalmology Clinic (s) Standish, E. & E. I.	Ophthalmology Clinic (s) Quackenboss E. & E. I.	
	Laryngology Clinic (s, 2 hrs.) DeBlois, B. C. H.		Laryngology Clinic (s, 2 hrs.) DeBlois, B. C. H.	Clinical Surgery Lecture (2 hrs.) B. C. H. Burrell & Blake	Laryngology Clinic (s, 2 hrs.) DeBlois, B. C. H.	
		<i>Dermatology</i> Clinic White, M. G. H.			<i>Dermatology</i> Clinic White, M. G. H.	
11		Laryngology Clinic (s) Coolidge, M. G. H.		Laryngology Clinic (s) Coolidge, M. G. H.		Laryngology Clinic (s) Coolidge, M. G. H.
	Ophthalmology Clinic (s) Spalding, E. & E. I.	Ophthalmology Clinic (s) Clap, E. & E. I.	Ophthalmology Clinic (s) Clap, E. & E. I.	Ophthalmology Clinic (s) Spalding, E. & E. I.		Ophthalmology Clinic (s) Clap, E. & E. I.
	Syphilis Clinic (s) Post, B. D.	Diagnosis in Clinical Surgery Warren & Porter M. G. H.	Syphilis Clinic (s) Post, B. D.		Syphilis Clinic (s) Post, B. D.	Surgical oper. M. G. H.
	<i>Neurology</i> Clinic Putnam, M. G. H.	Ophthalmology Clinic (s) Jack, E. & E. I.		<i>Neurology</i> Clin. Lect. Walton, M. G. H.	Ophthalmology Clinic (s) Jack, E. & E. I. Surgical oper. B. C. H.	<i>Neurology</i> Clin. Lect. Walton, M. G. H.

12	Clinical Surgery Lecture Mumford M. G. H.	Ophthalmology Lecture Standish E. & E. I.	Syphilis Lecture Post, B. D.	Genito-urin. Surg. Clin. Lect. Thornlike B. C. H.	Ophthalmology Lecture Standish E. & E. I.	Ophthalmology Lecture Standish E. & E. I.
2	<i>Exper. Physiol.</i> Lab. (2 hrs.) W. T. Porter H. M. S.	<i>Exper. Physiol.</i> Lab. (2 hrs.) W. T. Porter H. M. S.	<i>Exper. Physiol.</i> Lab. (2 hrs.) W. T. Porter H. M. S.	Clin. Microscopy Lab. Whitney H. M. S.	<i>Exper. Physiol.</i> Lab. (2 hrs.) W. T. Porter H. M. S.	Clin. Microscopy Lab. Whitney H. M. S.
3	<i>After Nov. 9</i> Operative Surgery Monks Room D					
4	Otology Lecture Blake Room A	Operative Surgery Monks Room D		Otology Lecture Blake Room A	Clinical Medicine Conference Room A	Orthopedic Surg. Lecture Bradford Room A or Ch. II.
5	<i>Oper. Obstetrics</i> Lect. and Demons. Green Room C	Regional Surgery M. H. Richardson Room C	Regional Surgery M. H. Richardson Room C	Laryngology Lecture DeBlois Room E	Operative Surgery Monks Room D	

DECEMBER.

	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
9	Clinical Medicine Prac. Therapeutics Shattuck, M. G. II.	Otology Clinic (s, 2 hrs.) Crockett, E. & E. I.		Practical Therapeutics Sears, B. C. II.	<i>Gynaecology</i> Clinic Green, B. C. II.	
		<i>Gynaecology</i> Clinic Green, B. C. II.		Otology Clinic (s, 2 hrs.) Crockett, E. & E. I.		Otology Clinic (s, 2 hrs.) Crockett, E. & E. I.
10	Ophthalmology Clinic (s, 2 hrs.) Haskell, E. & E. I.	Ophthalmology Clinic (s) Quackenboss E. & E. I.	Ophthalmology Clinic (s) Jack, E. & E. I.	Ophthalmology Clinic (s) Haskell, E. & E. I.	Ophthalmology Clinic (s) Quackenboss E. & E. I.	Ophthalmology Clinic (s) Jack, E. & E. I.
	Laryngology Clinic (s, 2 hrs.) DeBlois, B. C. II.		Laryngology Clinic (s, 2 hrs.) DeBlois, B. C. II.		Laryngology Clinic (s, 2 hrs.) DeBlois, B. C. II.	
		<i>Dermatology</i> Clinic White, M. G. II.		Clinical Surgery Lecture (2 hrs.) Burrell & Blake B. C. II.	<i>Dermatology</i> Clinic White, M. G. II.	
11		Laryngology Clinic (s) Coolidge, M. G. II.		Laryngology Clinic (s) Coolidge, M. G. II.		Laryngology Clinic (s) Coolidge, M. G. II.
			Ophthalmology Clinic (s) Clap, E. & E. I.			Ophthalmology Clinic (s) Clap, E. & E. I.
	Syphilis Clinic (s) Post, B. D.	Ophthalmology Clinic (s) Spalding, E. & E. I.	Syphilis Clinic (s) Post, B. D.		Syphilis Clinic (s) Post, B. D.	Surgical oper. M. G. II.
	<i>Neurology</i> Clinic Putnam, M. G. II.	Diagnosis in Clinical Surgery Clinic Warren & Porter M. G. II.		<i>Neurology</i> Clin. Lecture Walton, M. G. II.	Ophthalmology Clinic (s) Spalding, E. & E. I. Surgical oper. B. C. II.	<i>Neurology</i> Clin. Lecture Walton, M. G. II.

12	Clinical Surgery Lecture Mumford M. G. II.		Syphilis Lecture Post, B. D.	Genito-urin. Surg. Clin. Lect. Thorndike B. C. II.		
2	<i>Exper. Physiol.</i> Lab. (2 hrs.) W. T. Porter H. M. S.		<i>Exper. Physiol.</i> Lab. (2 hrs.) W. T. Porter H. M. S.		<i>Exper. Physiol.</i> Lab. (2 hrs.) W. T. Porter, H. M. S.	
		Clin. Microscopy Lab. Whitney H. M. S.		Clin. Microscopy Lab. Whitney H. M. S.	Clin. Microscopy Lab. Whitney H. M. S.	
3						
4	Otology Lecture Blake Room A		Operative Surgery Monks Room D.	Otology Lecture Blake Room A	Clinical Medicine Conference Room A	Orthopedic Surg. Lecture Bradford Room A
		Syphilis Lecture Post Room A				
5	<i>Oper. Obstetrics</i> Lect. and Demon. Green Room C	Regional Surgery M. H. Richardson Room C.	Regional Surgery M. H. Richardson Room C	Laryngology Lecture DeBois Room E	Operative Surgery Monks Room D	

JANUARY.

	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
9	Clinical Medicine Prac. Therapeutics Shattuck, M. G. H.	Otology Clinic (s, 2 hrs.) Crockett, E. & E. I.		Practical Therapeutics Sears, B. C. H.	<i>Gynaecology</i> Clinic Green, B. C. H.	
		<i>Gynaecology</i> Clinic Green, B. C. H.		Otology Clinic (s, 2 hrs.) Crockett, E. & E. I.		Otology Clinic (s, 2 hrs.) Crockett, E. & E. I.
10	Ophthalmology Clinic (s) Standish E. & E. I.	Ophthalmology Clinic (s) Quackenbush E. & E. I.	Ophthalmology Clinic (s) Standish E. & E. I.	Ophthalmology Clinic (s) Standish E. & E. I.	Ophthalmology Clinic (s) Quackenbush E. & E. I.	Ophthalmology Clinic (s) Standish, E. & E. I.
	Laryngology Clinic (s, 2 hrs.) DeBlois, B. C. H.	Laryngology Clinic (s, 2 hrs.) DeBlois, B. C. H.			Laryngology Clinic (s, 2 hrs.) DeBlois, B. C. H.	
		<i>Dermatology</i> Clinic White, M. G. H.		Clinical Surgery Lecture (2 hrs.) Burrell & Blake B. C. H.	<i>Dermatology</i> Clinic White, M. G. H.	
11		Laryngology Clinic (s) Coolidge, M. G. H.		Laryngology Clinic (s) Coolidge, M. G. H.		Laryngology Clinic (s) Coolidge, M. G. H.
	Ophthalmology Clinic (s) Spalding, E. & E. I.	Ophthalmology Clinic (s) Clap, E. & E. I.	Ophthalmology Clinic (s) Clap, E. & E. I.	Ophthalmology Clinic (s) Spalding, E. & E. I.		Ophthalmology Clinic (s) Clap, E. & E. I.
	Syphilis Clinic (s) Post, B. D.	Diagnosis in Clinical Surgery. Clinic Warren & Porter M. G. H.	Syphilis Clinic (s) Post, B. D.		Syphilis Clinic (s) Post, B. D.	Surgical oper. M. G. H.
	<i>Neurology</i> Clinic Putnam, M. G. H.	Ophthalmology Clinic (s) Jack, E. & E. I.		<i>Neurology</i> Clin. Lect. Walton, M. G. H.	Ophthalmology Clinic (s) Jack, E. & E. I. Surgical oper. B. C. H.	<i>Neurology</i> Clin. Lect. Walton, M. G. H.

12	Clinical Surgery Lecture Mumford M. G. H.	Syphilis Lecture Post, B. D.	Genito-urin. Surg. Clin. Lect. Thorndike B. C. H.		
2	<i>Exper. Physiol.</i> Lab. (2 hrs.) W. T. Porter H. M. S.	<i>Exper. Physiol.</i> Lab. (2 hrs.) W. T. Porter H. M. S.	Clin. Microscopy Lab. Whitney H. M. S.	<i>Exper. Physiol.</i> Lab. (2 hrs.) W. T. Porter H. M. S.	
3		Clin. Microscopy Lab. Whitney H. M. S.		Clin. Microscopy Lab. Whitney H. M. S.	
4				Clinical Medical Conference Room A	Orthopedic Surg. Lecture Bradford Room A
5	<i>Oper. Obstetrics</i> Lect. & Dem. (1 hr.) Green, Room C Demonstrations (s, 1 hr.)	Syphilis Lecture Post, Room A Operative Surgery M. H. Richardson Room C	Operative Surgery M. H. Richardson Room C Laryngology Lecture DeBlois, Room E		

FEBRUARY.

	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
9	Clinical Medicine Prac. Therapeutics Shattuck, M. G. H.	<i>Gynaecology</i> Clinic Green, B. C. H.		Clinical Medicine Clinic Withington, B. C. H.	<i>Gynaecology</i> Clinic Green, B. C. H.	Practical Therapeutics Sears, Room E
		Surgery Wards (s) M. G. H. & B. C. H.	Surgery Wards (s) M. G. H. & B. C. H.		Surgery Wards (s) M. G. H. & B. C. H.	
	<i>Otology</i> Clinic (2 hrs.) Hammond, E. & E. I.		<i>Otology</i> Clinic (2 hrs.) Hammond, E. & E. I.		<i>Otology</i> Clinic (2 hrs.) Hammond, E. & E. I.	
10		<i>Dermatology</i> Clinic White, M. G. H.	<i>Ophthalmology</i> Clinic (2 hrs.) Standish, E. & E. I.	Clinical Surgery Lecture (2 hrs.) Burrell, Monks, & Blake, B. C. H.		<i>Ophthalmology</i> Clinic (2 hrs.) Standish, E. & E. I.
		<i>Orthopedic Surg.</i> Clinic Bradford, Ch. H.			<i>Dermatology</i> Clinic White, M. G. H.	
	Surgical Clinic M. H. Richardson M. G. H.			<i>Orthopedic Surg.</i> Clinic Bradford, Ch. H.		
11		Diagnosis in Clinical Surgery. Clinic. (2 hrs.) M. H. Richardson M. G. H.	Clinical Medicine Practical Exercise Clinic R. C. Cabot, M. G. H.		Clinical Medicine Practical Exercise Clinic R. C. Cabot, M. G. H.	
						Surgical operations M. G. H.
					Surgical operations B. C. H.	

12	Clinical Surgery Lecture M. H. Richardson and Mumford M. G. H.	Contagious Dis. Clinic (s) McCollom B. C. H.	Neurology Clinic Knapp, B. C. H.	Genito-urin. Surg. Clin. Lect. Watson B. C. H.	Contagious Dis. Clinic (s) McCollom B. C. H.
2	Neurology Clinic Knapp, B. C. H.	Neurology Clinic Knapp, B. C. H.	Neurology Clinic Knapp, B. C. H.	Clin. Microscopy Lab. Whitney H. M. S.	Exper. Physiol. Lab. (2 hrs.) W. T. Porter H. M. S.
3	Psychiatry Clinic Cowles, McL. H.	Comp. Et. Infec. Dis. Lecture Smith, Room C	Municip. Sanita. Lecture Durgin, Room C	Comp. Et. Infec. Dis. Lecture Smith, Room C	Municip. Sanita. Lecture Durgin, Room C
4	Orthopedic Surg. Clinic Bradford, Ch. H.	Comp. Et. Infec. Dis. Lecture Smith, Room C	Municip. Sanita. Lecture Durgin, Room C	Clin. Microscopy Lab. Whitney, H. M. S.	Psychiatry Clinic Noyes, B. I. H.
5-7	Operative Surgery Dem. (s, 2 hrs.) H. M. S.	Operative Surgery Dem. (s, 2 hrs.) H. M. S.	Operative Surgery Dem. (s, 2 hrs.) H. M. S.	Hygiene Lecture Harrington, Room A Operative Surgery Dem. (s, 2 hrs.) H. M. S.	Orthopedic Surg. Clinic Bradford, Ch. H.

MARCH.

	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
9	Clinical Medicine Prac. Therapeutics Shattuck, M. G. II.	<i>Gynaecology</i> Clinic Green, B. C. II.		Clinical Medicine Clinic Withington, B. C. II.	<i>Gynaecology</i> Clinic C. M. Green, B. C. II.	Practical Therapeutics Sears, Room E.
		Surgery Wards (s) M. G. H. & B. C. H.	Surgery Wards (s) M. G. H. & B. C. H.		Surgery Wards (s) M. G. II. & B. C. II.	
	<i>Otology</i> Clinic (2 hrs.) Hammond, E. & E. I.		<i>Otology</i> Clinic (2 hrs.) Hammond, E. & E. I.		<i>Otology</i> Clinic (2 hrs.) Hammond, E. & E. I.	<i>Ophthalmology</i> Clinic (2 hrs.) Standish, E. & E. I.
10			<i>Ophthalmology</i> Clinic (2 hrs.) Standish, E. & E. I.	Clinical Surgery Lecture (2 hrs.) Burrell, Monks, & Blake, B. C. II.		
		<i>Dermatology</i> Clinic White, M. G. II.			<i>Dermatology</i> Clinic White, M. G. H.	
	Surgical Clinic M. H. Richardson M. G. II.	<i>Orthopedic Surg.</i> Clinic Bradford, Ch. II.		<i>Orthopedic Surg.</i> Clinic Bradford, Ch. II.		
11		Diagnosis in Clinical Surgery Clinic (2 hrs.) M. H. Richardson M. G. II.	Clinical Medicine Practical Exercise Clinic R. C. Cabot, M. G. H.		Clinical Medicine Practical Exercise Clinic R. C. Cabot, M. G. II.	
						Surgical oper. M. G. II.
					Surgical oper. B. C. II.	

12	Clinical Surgery Lecture M. H. Richardson and Mumford M. G. H.	Contagious Diseases Clinic (s) McCollom, B. C. H.	Neurology Clinic Knapp, B. C. H.	Genito-urin. Surg. Clin. Lect. Watson, B. C. H.	Contagious Diseases Clinic (s) McCollom, B. C. H.
	Neurology Clinic Knapp, B. C. H.				
2	Exper. Physiol. Lab. (2 hrs.) W. T. Porter H. M. S.	Clin. Microscopy Lab. Whitney, H. M. S.	Exper. Physiol. Lab. (2 hrs.) W. T. Porter H. M. S.	Clin. Microscopy Lab. Whitney, H. M. S.	Exper. Physiol. Lab. (2 hrs.) W. T. Porter, H. M. S.
3	Psychiatry Clinic Cowles, McL. H.	Comp. Et. Infec. Dis. Lecture Smith, Room C	Municip. Sanita. Lecture Durgin, Room C	Comp. Et. Infec. Dis. Lecture Smith, Room C	Municip. Sanita. Lecture Durgin, Room C
		Orthopedic Surg. Clinic Bradford, Ch. H.			Psychiatry Clinic Noyes, B. I. H.
4		Gynaecology Conference Green, Room C			Clinical Medicine Conference Room C
5-7	Operative Surgery Dem. (s, 2 hrs.) H. M. S.	Hygiene Lecture Harrington, Room A Operative Surgery Dem. (s, 2 hrs.) H. M. S.	Operative Surgery Dem. (s, 2 hrs.) H. M. S.	Hygiene Lecture Harrington, Room A Operative Surgery Dem. (s, 2 hrs.) H. M. S.	Hygiene Lecture Harrington, Room A Operative Surgery Dem. (s, 2 hrs.) H. M. S.

APRIL.

	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
9	Clinical Medicine Prac. Therapeutics Shattuck, M. G. II.	<i>Gynaecology</i> Clinic Green, B. C. II.		Clinical Medicine Clinic Withington, B. C. II.	<i>Gynaecology</i> Clinic Green, B. C. II.	<i>Otology</i> Clinic (2 hrs.) Crockett, E. & E. I.
		Surgery Wards (s) M. G. II. & B. C. II.	Surgery Wards (s) M. G. II. & B. C. H.		Surgery Wards (s) M. G. II. & B. C. II.	Practical Therapeutics Sears. Room E
		<i>Otology</i> Clinic (2 hrs.) Crockett, E. & E. I.		<i>Otology</i> Clinic (2 hrs.) Crockett, E. & E. I.		
10			<i>Ophthalmology</i> Clinic (2 hrs.) Standish E. & E. I.	Clinical Surgery Lecture (2 hrs.) Burrell & Blake B. C. II.		<i>Ophthalmology</i> Clinic (2 hrs.) Standish E. & E. I.
	Surgical Clinic M. H. Richardson M. G. II.	<i>Dermatology</i> Clinic White, M. G. II.			<i>Dermatology</i> Clinic White, M. G. H.	
		<i>Orthopedic Surg.</i> Clinic Bradford, Ch. II.		<i>Orthopedic Surg.</i> Clinic Bradford, Ch. II.		
11		Diagnosis in Clinical Surgery Clinic (2 hrs.) M. H. Richardson M. G. II.	Clinical Medicine Practical Exercise Clinic R. C. Cabot, M. G. II.		Clinical Medicine Practical Exercise Clinic R. C. Cabot, M. G. II.	
						Surgical oper. M. G. II.
					Surgical oper. B. C. II.	

12	Clinical Surgery Lecture M. H. Richardson and Mumford M. G. H.	Contagious Diseases Clinic (s) McCollom, B. C. H.	Neurology Clinic Knapp, B. C. H.	Genito-urin. Surg. Clinical Lecture Watson, B. C. H.	Contagious Diseases Clinic (s) McCollom, B. C. H.
	Neurology Clinic. Knapp, B. C. H.				
2	Exper. Physiol. Lab. (2 hrs.) W. T. Porter H. M. S.	Clin. Microscopy Lab. Whitney, H. M. S.	Exper. Physiol. Lab. (2 hrs.) W. T. Porter H. M. S.	Clin. Microscopy Lab. Whitney, H. M. S.	Exper. Physiol. Lab. (2 hrs.) W. T. Porter H. M. S.
					Clin. Microscopy Lab. Whitney, H. M. S.
3	Psychiatry Clinic Cowles, McL. H.	Comp. Et. Infec. Dis. Lecture Smith, Room C		Comp. Et. Infec. Dis. Lecture Smith, Room C	Psychiatry Clinic Noyes, B. I. H.
		Orthopedic Surg. Clinic Bradford, Ch. H.			Orthopedic Surg. Clinic Bradford, Ch. H.
4		Gynaecology Conference (Green, Room C)			
		Hygiene Lecture Harrington, Rm. A Operative Surgery Dem. (s, 2 hrs.) H. M. S.	Operative Surgery Dem. (s, 2 hrs.) H. M. S.	Hygiene Lecture Harrington, Rm. A Operative Surgery Dem. (s, 2 hrs.) H. M. S.	
5-7	Operative Surgery Dem. (s, 2 hrs.) H. M. S.				

MAY.

	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
9	Clinical Medicine Prac. Therapeutics Shattuck, M. G. II.	<i>Otology</i> Clinic (2 hrs.) Blake & Crockett E. & E. I.		Clinical Medicine Clinic Wilmington, B. C. II.		<i>Otology</i> Clinic (2 hrs.) Blake & Crockett E. & E. I.
		Surgery Wards (s) M. G. II. & B. C. II.	Surgery Wards (s) M. G. II. & B. C. II.		Surgery Wards (s) M. G. II. & B. C. II.	Practical Therapeutics Sears. Room E
		<i>Gynaecology</i> Clinic Green, B. C. II.		<i>Otology</i> Clinic (2 hrs.) Blake & Crockett E. & E. I.	<i>Gynaecology</i> Clinic Green, B. C. II.	
10			<i>Ophthalmology</i> Clinic (2 hrs.) Standish, E. & E. I.	Clinical Surgery Lecture (2 hrs.) Burrell & Blake B. C. II.		<i>Ophthalmology</i> Clinic (2 hrs.) Standish, E. & E. I.
	Surgical Clinic M. II. Richardson M. G. II.	<i>Dermatology</i> Clinic White, M. G. II.			<i>Dermatology</i> Clinic White, M. G. II.	
		<i>Orthopedic Surg.</i> Clinic Bradford, Ch. II.		<i>Orthopedic Surg.</i> Clinic Bradford, Ch. II.		
11		Diagnosis in Clinical Surgery Clinic (2 hrs.) M. II. Richardson M. G. II.	Clinical Medicine Practical Exercise Clinic R. C. Cabot. M. G. II.		Clinical Medicine Practical Exercise Clinic R. C. Cabot, M. G. II.	
						Surgical oper. M. G. II.
					Surgical oper. B. C. II.	

12	Clinical Surgery Lecture M. H. Richardson and Mumford M. G. H.	Contagious Diseases Clinic (s) McCollom, B. C. II.	Neurology Clinic Knapp, B. C. II.	Genito-urin. Surg. Clin. Lect. Watson, B. C. II.	Contagious Diseases Clinic (s) McCollom, B. C. II.	
2	Exper. Physiol. Lab. (2 hrs.) W. T. Porter, H.M.S.	Clin. Microscopy Lab. Whitney, H. M. S.	Exper. Physiol. Lab. (2 hrs.) W. T. Porter, H.M.S.	Clin. Microscopy Lab. Whitney, H. M. S.	Exper. Physiol. Lab. (2 hrs.) W. T. Porter, H.M.S.	
3				Comp. Et. Infec. Dis. Lecture Smith, Room C	Clin. Microscopy Lab. Whitney, H. M. S.	
4		Comp. Et. Infec. Dis. Lecture Smith, Room C			Clinical Medicine Conference Room C	Orthopedic Surg. Clinic Bradford, Ch. II.
5		Orthopedic Surg. Clinic Bradford, Ch. II.	Gynaecology Conference Green, Room C	Hygiene Lecture Harrington, Room A		

DEGREES.

On March 16, 1904, degrees were conferred as follows :—

M. D.

Harold Winslow Ayres.	John Joseph Mangan, A.B. (<i>Holy</i>
Horace Keith Boutwell, s.B. 1900.	<i>Cross Coll.</i>) 1883, A.M. (<i>ibid.</i>)
George William Clarke.	1896, M.D. (<i>Coll. of P. & S.</i>) 1891.
Percy Greenough Drake, s.B. (<i>Dart-</i>	Daniel Paul O'Brien, M.D.V. 1899.
<i>mouth Coll.</i>) 1899.	Ernest Lawrence Parker.
	Alexander Hamilton Rice, A.B. 1898.

M. D. (*Out of course.*)

Zabdiel Boylston Adams, as of the Class of 1903.
 Edward John Grainger, A.B. (*Boston Coll.*) 1898, as of the Class of 1903.
 David Woodbury Parker, A.B. (*Dartmouth Coll.*) 1899, as of the Class of 1903.

M. D. cum laude. (*Out of Course.*)

Thomas Newcomb Stone, as of the Class of 1903.

On Commencement Day, June 29, 1904, degrees were conferred as follows :—

M. D.

Joseph Ascher.	Laurence Francis Cusick.
Gerardo Monari Balboni.	Edmund Gerrish Dearborn, A.B.
James Dellinger Barney, A.B. 1900.	(<i>Dartmouth Coll.</i>) 1900.
Daniel Edwin Bartlett.	Fred Fay Dexter.
George Leon Bastian.	Frederick August Donaldson, A.B.
Joseph Anthony Bianco.	1896.
Allen Hanson Blake.	Andrew Francis Downing, A.B.
Alfred Preston Bowen.	1900.
Thomas Joseph Brennan.	Edwin Lewis Drowne.
Walter Linn Burns, s.B. (<i>Villanova</i>	Dana Warren Drury.
<i>Coll.</i>) 1896, A.B. (<i>ibid.</i>) 1897.	Ernest Arey Dyer.
Frank Henry Carlisle.	Charles Daniel Easton, A.B. (<i>Brown</i>
John Donovan Clark, s.B. 1901.	<i>Univ.</i>) 1899, A.M. (<i>ibid.</i>) 1900.
Fred Ellsworth Clow.	Frank Birch Easton, A.B. (<i>Brown</i>
Leslie Erwin Coffin.	<i>Univ.</i>) 1900.
Frank Aloysius Conlon.	Frank Albert Fearney.
William Edward Connolly, A.B.	Henry Martyn Field, A.B. (<i>Yale</i>
1898.	<i>Univ.</i>) 1900.

- Harry Finkelstein.
 Edward James Fitzgibbon.
 Alvin Warren Foss, A.B. (*Bates Coll.*) 1897.
 Lester Pierpont Gerrish, A.B. (*Bates Coll.*) 1896.
 James Glass.
 Frederick Leo Good.
 James Chapman Graves, Jr., A.B. (*Amherst Coll.*) 1899.
 Charles Perley Gray, S.B. (*Univ. of Maine*) 1900.
 Loring Grimes, 2d.
 William Perry Hager, S.B. 1900.
 Albert William Hancock.
 Royal Hatch, A.B. (*Dartmouth Coll.*) 1900.
 Edwards Woodbridge Herman.
 Walter Alexis Hosley, A.B. 1900.
 George Plummer Howe, A.B. 1900.
 Wallace Eugene Hubbard.
 Edward Daniel Hurley.
 Edward John Hussey, A.B. (*Holy Cross Coll.*) 1899.
 Harry James Inglis.
 George Henry Jackson.
 Ralph Porter Kent.
 Henry Daniel King.
 Hamilton Theodore King.
 Francis Howard Lahey.
 Ralph Everett Lee.
 James Prince Lewis, Jr.
 Louis Lewis.
 Henry Demarest Lloyd, Jr., A.B. 1899.
 Henry Nathan Longfellow, PH.G. (*Mass. Coll. of Pharmacy*) 1890.
 Dean Sherwood Luce.
 Frederick Louis Lutz.
 Ralph William McAllester, A.B. 1900.
 Francis Blake McClintock.
 John Allen McLean.
 Malcolm Sawyer McLellan.
 Harold Kenneth Marshall.
 Herman Prince Marshall.
 Louis Mendelsohn, A.B. 1901.
 Harry Carleton Messinger.
 Nathaniel Niles Morse, B.L. (*Dartmouth Coll.*) 1900.
 Everard Lawrence Oliver.
 Clarence Eugene Ordway, A.B. (*Yale Univ.*) 1900.
 Roscoe Hunter Philbrick.
 John Charles Phillips, S.B. 1899.
 Walter Gray Phippen, A.B. 1900.
 Chandler Robbins, A.B. 1899.
 William Bradford Robbins, A.B. 1899.
 John Conway Rogers, Jr., A.B. (*Bowdoin Coll.*) 1899.
 Mark Homer Rogers, A.B. (*Williams Coll.*) 1900.
 Charles Bradley Russell, S.B. (*Illinois Coll.*) 1899.
 Frederick Ward Seymour.
 Malcolm Seymour.
 Lee Simon Shoninger, PH.B. (*Yale Univ.*) 1900.
 Louis Mahlon Spear, A.B. (*Bowdoin Coll.*) 1900.
 Max Sturnick.
 Charles Brent Sullivan.
 John Joseph Sullivan.
 Joseph Mariner Thompson.
 William Henry Traves, Jr.
 Rudolf Henry Wald.
 Arthur Joseph White.
 Ross Kittredge Whiton, A.B. 1900.
 Willard Porter Woodbury, A.B. 1900.
 Walter Carleton Woodward, B.L. (*Dartmouth Coll.*) 1899.
 Walter Thomas Woolley, S.B. (*Ill. Wesleyan Univ.*) 1898.

M. D. cum laude.

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| Louis Arkin, s.B. 1901. | Frederick Clinton Kidner, A.B. |
| Charles Hume Baldwin, A.B. (<i>Williams Coll.</i>) 1900. | 1900. |
| William Lester Barnes, A.B. 1900. | Lucius Collinwood Kingman, A.B. |
| Lynn Staley Beals, A.B. 1900. | (<i>Yale Univ.</i>) 1900. |
| Leon Gage Beeley, A.B. 1900. | William George Lee, A.B. 1901. |
| Edward Bridge Bigelow, A.B. (<i>Dartmouth Coll.</i>) 1900. | Harry Linenthal, A.B. 1900. |
| Nelson Henry Clark, s.B. (<i>Antioch Coll.</i>) 1897. | Louis Nelson, A.B. 1900. |
| Arthur Alden Cushing. | Edwin Hemphill Place. |
| Herbert William Ellam. | Hugo Bruno Charles Riemer. |
| Marshal Fabyan, A.B. 1900. | Patrick Somers Smyth, A.B. (<i>St. Francis Xavier's Coll.</i>) 1896. |
| George Benson Fenwick, A.B. 1900. | Clarence Hathorne Staples, A.B. |
| Louis Mark Freedman, A.B. 1901. | (<i>Wesleyan Univ.</i>) 1900. |
| Samuel Warren Goddard. | Sidney Strauss, A.B. 1901. |
| John Bryant Hartwell, A.B. (<i>Yale Univ.</i>) 1900. | Edward Francis Timmins. |
| | Ray Lester Whitney, PH.B. (<i>Brown Univ.</i>) 1900. |
| | John Thomas Williams. |

M. D. (*As of March, 1904.*)

- George Edwin Deering.
 Isidore Stanley Kahn, A.B. 1900.
 Jacob Sleeper Kelley.

ADMISSION EXAMINATION.

JUNE, 1904.

CHEMISTRY.

Laboratory note-books in Qualitative Analysis, properly endorsed, must be handed in to the Instructor at this examination.

1. What is a deliquescent salt; an efflorescent salt?
2. What are the properties of
 MgSO_4 ; Na_2HPO_4 ; AgNO_3 ; $\text{K}_4\text{Fe}(\text{CN})_6$?
3. Describe briefly the method employed in Qualitative Analysis for determining the presence of zinc in an unknown solution.
4. How determine bromides in the presence of iodides?

EXAMINATION PAPERS.

(*Annual Examinations, 1904.*)



First Year Studies.

ANATOMY. — Professor DWIGHT.

1. What are the parts of a typical vertebra? How many vertebrae are there in each region of the spine? Which are the chief peculiar vertebrae?
2. Describe the elbow joint.
3. Describe the middle ear.
4. Give a general description of a median section of the male pelvis.
5. Describe the great motor tract of the central nervous system.
6. Describe the course and relations of the oesophagus.

HISTOLOGY. — Professor MINOT.

[Each student is given four sections to correspond with the first four specimens below. He is expected to make simple drawings only, but sufficient to show that he has correctly identified the parts. Any student who draws tissues or structures, not shown in his preparations, will be considered to have failed in all his answers.]

1. What is the organ? How is it cut? How is the section stained? Describe the lymphatic structures, and draw them with a low power to show their relations to other parts of the organ.
2. Draw with high power and describe the epithelium. From what is the section made?
3. What is the organ? What does the section show concerning the pathways of the blood circulation?
4. Draw and describe the section of the spinal cord. Compare it with a section of the adult spinal cord.



5. From what germ-layer is the spinal cord developed?
6. What is a sinusoid?
7. Where do chromosomes occur? In what kind of cells can they be demonstrated?

PHYSIOLOGY. — Professor W. T. PORTER.

(Answer any three questions, but not more than three. The answer to any one question must not exceed three hundred words. Mention, where possible, experimental evidence in support of your opinion. Matter not bearing directly on the question asked will count against the writer.)

1. Discuss the action of lymphagogues.
2. Discuss proteid diets and their relation to metabolism.
3. State evidence for the segmental concept of the nervous system.
4. Give the principal facts regarding inhibition.

PHYSIOLOGICAL AND PATHOLOGICAL CHEMISTRY.

Professors WOOD and HILLS.

1. Describe the tests for glucose in the order of their relative importance. Which of these tests distinguish glucose from other reducing substances which may occur in urine?

2. Give an account of the metabolism of carbohydrates.

3. In what respects does the action of trypsin differ from that of pepsin?

4. Give a brief account of the chemistry of muscle.

5. Composition of milk? What are the most essential differences between woman's and cow's milk?

6. Name the various forms of acid reacting substances which may be present in the contents of the stomach in conditions of health and disease, and outline the method of determining the presence of the forms found in the normal contents.

7. Under what conditions may the urine be passed habitually in large quantity and of low sp. gr.?

8. What are the characteristics of the urine and sediment during the progress of a case of toxic nephritis?

9. Given a quantity of urine averaging 1000 cc. daily and containing constantly a slight trace of albumin, what kidney disease or disturbances may be present, and how distinguish between them?

10. Discuss the following specimens of urine, giving reasons for the inferences which may be drawn from them:—

CASE A.

Normal color. Very acid. Sp. Gr. = 1017. Considerable sediment.

Uph. = n.	\bar{U} . = 1.26%.	Cl. = 0.418%.	E. P. = sl. —.
Ind. = n.	\bar{U} . = 0.004%.	Sf. = n.	A. P. = —.

Slightest possible trace of albumin. No bile or sugar.

Sediment = Rarely a small hyaline and finely-granular cast. Secondary uric acid crystals.

Amount of urine	in 24 hours = 1380 cc.
“ “ urea	“ “ “ = 17.39 grms.
“ “ uric acid	“ “ “ = 0.47 “
“ “ chlorine	“ “ “ = 5.77 “
“ “ phosphoric acid	“ “ “ = 1.28 “
uric acid : urea	= 1 : 37

11. CASE B.

Pale color. Acid. Sp. Gr. = 1012. Considerable sediment.

Uph. = —. $\bar{U} = 0.82\%$. Cl. = 0.2%. E. P. = —.

Ind. = —. $\bar{U} = 0.014\%$. Sf. = —. A. P. = —.

Albumin = $\frac{1}{60}\%$. Very slight trace of sugar. No bile.

Sediment = Numerous and large hyaline and granular casts; an occasional waxy cast; numerous granular renal cells.

Amount of urine	in 24 hours = 1480 cc.
“ “ urea	“ “ “ = 12.13 grms.
“ “ uric acid	“ “ “ = 0.207 “
“ “ chlorine	“ “ “ = 2.96 “
“ “ phosphoric acid	“ “ “ = 0.50 “
uric acid : urea	= 1 : 58

12. How can an examination of a stained specimen of blood aid in the differential diagnosis between the following conditions: Pneumonia, typhoid, uncinaria, trichinosis, and malaria? What is the difference in the blood pictures of myelogenous and lymphatic leukemia?

PRACTICAL EXAMINATION.

Physiological Chemistry.—1. Test the two solutions provided: (a) for carbohydrates; (b) for enzymes. 2. In the specimen of gastric juice provided: (a) make complete qualitative and quantitative acidimetry; (b) test for enzymes.

Pathological Chemistry.—A complete chemical and microscopic examination of a specimen of pathological urine, and a written report of the inferences to be drawn from the results obtained, was required.

Second Year Studies.

ANATOMY.—Professor DWIGHT.

1. What are the characteristic differences between the first and the last rib?
2. Give the shape and the relations of the prostate. What is its structure?
3. Describe the thoracic duct.
4. What are the chief differences between the right and left lungs?
5. What bones does the astragalus articulate with? Describe briefly the articular surfaces.
6. Describe briefly the adenoid collections of the mouth and pharynx.

BACTERIOLOGY.—Professor ERNST.

1. Diphtheria. Tell what you know of its specific etiology and methods of diagnosis.
2. What is the agglutinating reaction in typhoid fever; how is it tested; upon what does it depend?
3. What are the various forms of Immunity; upon what is Acquired Immunity supposed to depend?

PATHOLOGY. — Professor COUNCILMAN.

Write answers to the first two questions on separate paper.

1. What animal parasites can be diagnosed as present in the body by microscopic examination of the stools and of the blood? State what is found in each case and any peculiarities which aid the diagnosis.

2. Describe the anatomical characters and the life history of *Taenia saginata*, the beef tape worm.

3. Glioma. Definition? Occurrence? Varieties? Relation to gliosis? Discuss its classification from the embryological and from the histological point of view.

4. Describe the gross and microscopic appearance of fat necrosis. Give the present theory of the formation of fat necrosis.

5. What different lesions may lead to the formation of scars (depressions) on the surface of the kidney?

6. Amyloid liver. Gross appearances? Situation of the amyloid in the liver? Chemical properties of amyloid?

7. Acute peritonitis. What are the commonest sources of origin?

8. Thrombi in the heart. Location? Cause of formation? Changes which they undergo? Clinical importance?

9. What form of carcinoma is commonly found in the tongue? What form in the colon?

10. What organisms are most frequently the cause of acute endocarditis of the mitral valve? Describe process of healing of such a lesion.

MATERIA MEDICA AND THERAPEUTICS.—Asst. Professor PFAFF.

1. Give the general pharmacology of the heavy metals.

2. Local and constitutional action of potassium iodide.

3. Action, uses, and untoward effects of carbolic acid; of antipyrin.

4. General methods of treatment of heart disease.

5. Enumerate the different urinary disinfectants and explain their method of action.

6. Pharmacological action of morphine.

7. Write prescriptions, avoiding abbreviations, and giving full directions to the patient. (1) ergot; (2) iron; (3) mercury; (4) strychnine sulphate; (5) hydrochloric acid; (6) chloral; (7) atropine sulphate; (8) lead acetate.

8. Action of quinine.

Third Year Studies.**THEORY AND PRACTICE.**—Professor FITZ.

1. The value in medical practice of the examination of fresh blood.
2. The diagnosis and treatment of remediable varieties of pernicious anaemia.
3. The relation between myxoedema and cretinism.
4. The characteristics and treatment of intestinal hemorrhage in typhoid fever.
5. The significance of multiple neuroses.
6. Enumerate the cardiac affections likely to cause sudden death.
7. The differential diagnosis of congestions of the lungs.
8. Treatment of gastric atony.
9. The comparative merits of the medical and surgical treatment of cancer of the intestine above the rectum.
10. The treatment of renal haematuria.

PEDIATRICS.—Professor RORCH.

[More credit will be given to an intelligent discussion of the case than to a correct diagnosis unsupported by such discussion.]

1. Discuss the following case, giving the differential diagnosis and treatment:—

A girl, six years old, began to have a cough about the 7th of November. The family history was not tubercular, but all her relatives were subject to bronchitis. She had had no known exposure to tuberculosis. Her doctor was not called until November 16. He then found a pneumonia of the left lower lobe. She was not very sick, but was a bad patient, taking her food and treatment very poorly. The temperature did not fall, but continued elevated, varying between 99° F. and 100° F. in the morning and 101° F. and 103° F. in the afternoon. She had no chills and no sweating. There was a good deal of cough with purulent expectoration, sometimes streaked with blood. She vomited occasionally. The bowels were constipated, but the movements were well digested. She lost flesh and strength rapidly. Dyspnoea was troublesome at first, but later ceased. She was unable to sit up on account of weakness. She was seen in consultation December 30.

Physical Examination. She was well developed, but poorly nourished. The skin was dry. Pallor was marked. The tongue was nearly clean. There was no rosary, but considerable flaring of the lower ribs. The upper and left borders of the cardiac dulness were not determined because of the flatness in the left chest. The right border of dulness was 1 cm. to the left of the right nipple. The action of the heart was regular. The sounds were strong, being loudest under the sternum and somewhat louder to the right of the sternum than to the left. The second sound at the pulmonic area was the louder. Both chests moved alike and the level of the intercostal spaces was the same on both sides. There was hyperresonance and exaggerated respiration throughout the whole right chest. There

was flatness over the whole left chest, extending downward in front to the seventh rib; below this there was tympany. In the lower left back the flatness was mixed with tympany. There was a very marked sense of resistance over the whole left chest. Respiration was everywhere bronchial in character and increased in intensity, except in the lower back. The voice sounds varied as did the respiration. No fremitus was obtained on either side. No râles were heard. The abdomen was rather full and apparently slightly tender. There was no evidence of fluid. There was no muscular spasm. The lower border of the liver was palpable 2 cm. below the costal border. The spleen was not palpable; the area was not determined. The extremities were normal. There was no oedema.

2. Give the symptoms, diagnosis, and treatment of a case of cyclic vomiting.

3. Give the treatment of a case of ileo-colitis in an infant 18 months old.

4. What is the significance of a nasal voice during convalescence in a case of diphtheria?

5. A boy at birth weighed $7\frac{1}{2}$ pounds; at six months he weighed 12 pounds. There are no symptoms of gastric or intestinal disturbance or of any disease, but he is fretful during the day and restless at night. His appetite is good, and his mother thinks that he does not fret so much and is better satisfied when fed at two-hour than at longer intervals. The mother has been giving him a mixture containing fat 3%, sugar 6%, proteids 1%, lime-water 5%, eight feedings in the 24 hours, amount at each feeding $\frac{3}{4}$ — 4, intervals of feeding two hours. What would you tell the mother (1) as to the degree of development he has attained; (2) as to the cause of the symptoms, and (3) as to the best management of the case? Write your prescription to the milk laboratory.

6. Give the differential diagnosis of the appearance in the mouth and throat in scarlet fever and measles.

SURGERY. — Professor WARREN.

1. What are the advantages, disadvantages, and the comparative clinical germicidal value of the following antiseptics: Corrosive sublimate, carbolic acid, permanganate of potash and oxalic acid, and alcohol?

2. Give the symptoms and treatment of hemorrhage.

3. In using chloroform as an anesthetic, what are the "danger signals"?

4. Give the time when provisional and when complete union occurs in the following fractures: Radius (Colles'), middle of the shaft of femur, fracture of a metatarsal bone.

5. Give the symptoms, prognosis, and treatment of intestinal obstruction from an "adhesion band."

6. Give the symptoms and prognosis of the forms of peritonitis that may be due to perforation of the hollow viscera.

7. Give the symptoms, prognosis, and treatment of acute pancreatitis.

8. Give the differential diagnosis of a tumor in Scarpa's triangle.

9. What are the indications and contraindications for trephining?

10. Give the diagnosis, prognosis, and treatment of carcinoma in the female breast.

OBSTETRICS. — Professor W. L. RICHARDSON.

1. What are the characteristic differences between the justo-minor and the simple flat pelvis?
2. What significance should be attached to a moderate degree of flowing in the first six months of pregnancy?
3. Describe the symptoms and treatment of a threatening abortion. How would you determine that an abortion was becoming inevitable? Give the treatment of such.
4. Mention some of the simple, remediable conditions which may cause delay in a case of labor and state what you would do to relieve them.
5. A primipara, after a labor of thirty-six hours, delivers herself of a baby weighing nine pounds. A caput succedaneum is found over the anterior, superior angle of the left parietal bone. What was the position of the head when the caput was formed?
6. Describe in detail the manner in which you would conduct the third stage of labor.
7. A ivpara has been in labor five hours. The os is two-thirds dilated; the breech presents; uterine contractions strong; progress slow; maternal condition good; foetal heart 160. Treatment?
8. The varieties, causes, and symptoms of placenta praevia. The treatment of a case of complete placenta praevia.
9. A primigravida, seen for the first time when in the fifth month, is found to have oedema of the face, vulva, and legs; for three weeks there has been considerable headache, and occasional mild attacks of pain in the epigastrium; there has been nausea, but no vomiting. The eyesight is considerably impaired; there is found to be retinitis, with a partial separation of the retina of one eye. The urine is scanty, contains renal elements, 2% of albumin, and a much diminished percentage of urea. Diagnosis, prognosis, and treatment?
10. Aside from infection of the paturient canal or breast, what are some of the causes of fever in the puerperium?

GYNAECOLOGY. — Asst. Professor DAVENPORT.

1. Describe in detail the method of bimanual examination.
2. A patient on examination is found to have a retroverted uterus, other pelvic conditions apparently normal. How would you determine the question whether there were adhesions or not?
3. What would be your treatment, (a) if the uterus is movable? (b) if adhesions are present?
4. What is cystocele and how should it be treated?
5. What are the indications for curetting the uterus? Describe the operation.

DERMATOLOGY.—Asst. Professor BOWEN.

1. Psoriasis.
2. Tinea versicolor.
3. Lupus vulgaris.
4. Varieties of alopecia.
5. Treatment of scabies.

NEUROLOGY.—Professor PUTNAM.

1. A middle aged man, a painter by trade, — of alcoholic habits and a syphilitic history, — awoke one morning with his right hand feeling prickly and uncomfortable, and found himself unable to extend the fingers or carpus. When seen, two weeks later, the electrical reactions were found to be normal, but careful tests showed slight blunting of the sensibility over certain areas of the hand and forearm. Give the diagnosis, and state where, in your opinion, the areas of impaired sensibility were situated. A long discussion of the case is not desired, but only brief statements.

2. Give the most characteristic features of the headache due, (*a*) to syphilis, (*b*) to brain tumor, (*c*) to neurasthenia.

3. Discuss the following case quite fully, taking up the prominent signs and symptoms in turn and stating to what pathological conditions they severally point. State any questions that occur to you, an answer to which might throw real light on the diagnosis.

A girl of eleven, of good previous health, except that for two or three weeks she had felt tired and poorly, was seized, on August 4, with headache and vomiting, and was then found to have a temperature of 105° F. During the next three days she seemed to be improving; the temperature dropped to 102° F. (morning and evening) and then fell to normal and did not again rise. Towards the end of the third day, however, her feet became "numb," and the legs and arms felt weak and heavy, and these symptoms grew steadily worse so by the next day she could no longer use the legs at all. During this period she suffered from pain referred to the thighs. The bowels had been obstinately constipated the first three days of her illness, but the paralysis of the legs was followed by incontinence of urine and faeces, which, however, lasted only a relatively short time.

On physical examination, which was made eight days after the onset of the illness, the pupils were found to be equal and responsive to light, the tongue much coated, but not deviating on protrusion, and the facial expression normal. The grasp of both hands was feeble, and the left arm could not be raised at the shoulder, though flexion at the elbow was normal. The right arm could be raised at both shoulder and elbow, though not with full strength. There was no noticeable contraction of the intercostal muscles even on forced inspiration, the breathing being entirely diaphragmatic and abdominal. Although the patient was unable to move either leg at the larger joints she could make slight movements of the toes and of the feet at the ankle. The sensibility, for light contact, and pricking, and to heat and cold, was everywhere normal. The knee-jerks, ankle-, and wrist-jerks were absent; and likewise the epigastric,

plantar, and umbilical reflexes. The pulse rate was 120, the temperature normal. Electrical tests showed the presence of slight degrees of R. D. of the most affected muscles.

The subsequent history of the case was one of improvement, but not of complete recovery.

PSYCHIATRY.—Dr. COWLES.

1. Describe the attention in its different forms and some of its disorders.

2. Describe a "dissociated idea-system," and mention some cases in which it occurs.

3. What are the characteristic symptoms of "Confusional Insanity?"

4. CASE.—A youth; age 17; student; heredity good, except that his mother has three attacks of depression or excitement. Shy and reticent, but considered natural, and did well in school until five months before admission to hospital when he began to lose interest and said the other boys teased him. Two months later refused to go on a vacation trip with cousin, fearing harm from him; a little suspicious generally. Then began to say he felt weak and rundown; sent to country; sight of a pistol made him afraid of being killed; suspicious; feared poison in his food; thought his family persecuted him; made several attempts at suicide and said he was losing his mind. Sent to Danvers Hospital two weeks before admission to McLean Hospital; said to have shown little interest in surroundings and appeared apathetic, but was clear, coherent, and oriented.

Committed to McLean Hospital, September, 1903. Fairly nourished; physical examination negative, except pulse 56, rather weak and irregular; does not occupy himself, says little and appeared not depressed, but indifferent; answers to questions careless and difficult to get, but generally accurate; told of his suspicions, but could give no reasons, except that he felt depressed and thought he would rather kill himself than be killed by others; this was said without emotion; calculates fairly well. In November less clear mentally, and more silent, but sometimes bursts out laughing; said he did not know anything; one day seized a bowling pin and struck another patient,—said he had nothing against the man, but "did it on impulse,—some one told me to do it." Showed no concern about it. In December worse; stands or walks about grunting, and sometimes crawling on the floor,—said he was an animal. Sometimes untidy; has weak and absurd delusions,—his father was a Jew,—he saw Buffalo Bill in the garden, etc.; sometimes smiling without apparent reason; probably hallucinations of hearing; says the red men fill his mind with nonsense,— "ideas come all of a sudden—they tried to mesmerize me;" "an evil influence" puts ideas in his head; asked if he felt comfortable, answered "Yes." Later, somewhat clearer, knows time and place, but continues passive, amiable, apathetic, talks more freely, but, as before, gives weak explanations of his absurd ideas. Not depressed nor excited.

Give diagnosis and prognosis, pointing out the characteristic symptoms.

Fourth Year Studies.**CLINICAL MEDICINE. — Professor SHATTUCK.**

[Discuss these cases in the order in which they are arranged. Assume that symptoms not mentioned are wanting; but as omissions, intentional or not, may occur, state them if essential. The intelligent discussion of the case will have more weight than a hasty and inconclusive though correct diagnosis. Write out all prescriptions in full.]

CASE 1. — A merchant, aged 35, is seen March 30. His maternal grandfather died insane, family history otherwise negative. Has never been very rugged. Last summer had a cough which persisted until he went to the mountains on the advice of his physician. Lately has felt rather better than usual. On the evening of March 28 attended an elaborate dinner. Shortly after returning home about midnight had a chill and began to vomit, lobster, asparagus and mushrooms being noted in the vomitus. On the morning of the 29th he complained of nausea and of violent general headache. Temp. 101°, pulse 96. Toward noon he began to grow stupid and within an hour could not be roused. The respiration became rhythmical with occasional intervals of apnoea lasting twenty-five seconds. The pulse also was rhythmical, varying from 38 to 108 as extreme limits, the lower rate corresponding to the periods of apnoea. On the morning of the 30th he had regained consciousness, but was still dull. Headache much better. Temp. normal, pulse and respiration showed a hardly noticeable rhythm. Vomiting had not occurred since 11 o'clock the preceding day. He remained dull, but could be roused to take interest in his surroundings. Is constantly tossing about the bed. At 5 o'clock in the afternoon, when making his afternoon visit, his physician noticed that he was absolutely deaf. Examination of ears negative. He replied intelligently but slowly to written questions, but appeared to have some difficulty in seeing them. For the past 24 hours he has required catheterization. Temp. 98°, pulse 72, resp. 24.

Physical examination shows a pale, but fairly well nourished man. Pupils contracted and unresponsive to light. Head moves freely except forward, in which direction motion seems slightly restricted. Examination of chest and abdomen negative except for a slight systolic murmur over the pulmonic area. Knee jerks lively, but equal. No Babinski, no ankle clonus. Patient apparently has full control of all his muscles. White cells 16,000. Urine high-colored, sp. gr. 1024, acid, very slight trace of albumen, few hyaline and fine granular casts, no sugar. Amount in past 24 hours, 32 oz.

Diagnosis? Prognosis? Treatment?

CASE 2. — A cigarmaker, 51 years of age, is seen March 15. Family history negative. Thirty-five years ago had tuberculosis of the knee, which recovered after operation, but left a stiff joint. Eighteen years ago had jaundice. Syphilis fifteen years ago, otherwise always well. Has used beer to excess.

About six weeks ago, while in his usual health, he had an attack of acute bronchitis for which he was given iodide of potassium. This he says upset his stomach and caused vomiting which lasted for a number of days. About two weeks after his cough began he noticed that his skin had a yellow tint which has been progressively growing deeper. Coinci-

dent with the jaundice a circumscribed reddish eruption appeared on various parts of his body and limbs which was diagnosed by his attending physician as erythema multiforme. Itching has been general and intense. There has been no vomiting for over two weeks, but his food has been carefully regulated. His appetite is poor. He has lost much in strength and flesh. His temperature has remained near the normal line, but has occasionally risen to 100° F., particularly during the last week. The pulse has varied between 70 and 80, with rising tendency. The stools are clay colored.

Patient still preserves considerable fat tissue, but has evidently lost weight. Looks sick. Deep icterus of a decidedly greenish tinge. Heart and lungs normal. The liver dulness begins at the sixth rib. Its lower edge, which appears to be smooth, can be felt about an inch below the costal margin. A fluctuating tumor of indefinite outline and size is suspected below the hepatic edge about in the mamillary line. Percussion over it shows an area of dulness about two inches in diameter. Deep palpation of abdomen reveals no other abnormality. No glandular enlargement, no characteristic scars. Urine contains much bile, but no other abnormal constituents. White cells, 8,000.

Diagnosis? Prognosis? Treatment?

CASE 3. — A business man, 58, married, of large frame, comes from Canada for advice. Family history and habits good. About twenty-five years ago he had a severe rheumatic fever, disabling him for several months. Ever since then his pulse has been more or less irregular; but he has suffered no inconvenience until about two years ago when he noticed that walking up the hill to his house caused some dyspnoea. Since then there has been failure in strength and loss of weight, upwards of fifty pounds. For the past three or four months he has been able to do very little, has driven to his business for an hour a day and back, and been unable to sleep an account of dyspnoea and pain in the right side of the abdomen. Appetite has been poor and digestion impaired.

Pulse irregular, intermittent, rapid, not corresponding with the heart beat. Respiration easy when quiet, temperature 98.6.

Complexion sallow, slightly yellow, with yellowish tinge to sclerotics. No cyanosis. Tongue heavily coated. Moderate soft oedema of lower legs. Lungs clear. Cardiac apex not defined to eye or touch. Percussion shows decided increase in the transverse diameter of the heart, the action of which is so rapid and irregular in force and rhythm that only a doubtful systolic apex murmur can be heard. The second sounds are clear, the pulmonic not specially accented.

The belly is flabby, the navel not flushed. Percussion dulness shifts with changing position. No fluctuation wave. Several inches below and following the right costal border and across the epigastrium a solid body, tender, with a firm edge descending with inspiration, is distinctly felt.

The urine, normal in amount, specific gravity 1028, contains a large trace of albumin, 2% of sugar, 1.26% urea, no bile, acetone or diacetic acid. Sediment, a few normal blood globules, a rare hyaline cast.

Diagnosis? Prognosis? Treatment?

CLINICAL SURGERY.—Professor M. H. RICHARDSON.

CASE 1. — The patient, a boy of six, presents the following history :— One year ago he had pneumonia followed by empyema. The empyema was drained, with complete recovery.

One week ago he was seized with pain in the middle of the abdomen. Vomiting followed immediately the onset of pain. Nothing unusual had been eaten. The pain continued to be general until three days ago, when it grew suddenly worse and became localized in the right lower quadrant of the abdomen. He began then to vomit, and has continued to vomit ever since. The pain from the right lower quadrant has spread all over the abdomen. The bowels have moved every day since the attack. At the present time there is no pain. There never has been anything like this before.

The family history is good.

Physical Examination. A well-developed and well-nourished boy, preternaturally intelligent, watchful, and apprehensive. Face pale, except for cheeks flushed about the eyes, which are hollow and sunken. Examination of the chest is negative. There is a good scar remaining from the operation for empyema. The abdomen is flat, but everywhere rigid. There is extreme tenderness all over the abdomen, but exquisite over the right iliac fossa. Temperature 102°; pulse 150 and thready; white count 40,000. No tumor or swelling can be detected in the right iliac fossa. There is no dulness there. The urine is negative.

Discuss the diagnosis, the prognosis, and the treatment.

CASE 2. — The patient is a woman 50 years of age, unmarried, manager of a hat business. Three or four years ago she noticed what seemed to be a lump in her right breast. This lump, however, disappeared, and was not felt again until last May. She then noticed again the lump in the right breast. During the past summer—the summer of 1903—she used to have pain starting from the breast and shooting into the hand. Then a small red spot appeared on the breast. She has not passed the menopause. With every menstruation the pain would be somewhat increased. From time to time this patient consulted her physician, who told her that the bunch seemed to be growing smaller. During the past winter, she says, the lump went away entirely, and could not be felt for a couple of months. There has been no injury to the breast; but it feels to the patient as if there were some heat in it. No cough; no shortness of breath.

The patient comes of very healthy stock. In uncles, aunts, brothers, sisters, father, and mother there have been no cases of cancer, of tuberculosis, or of any constitutional or hereditary disease.

Physical Examination. On inspection the right breast is larger than the left. A lump can be seen at the upper and outer quadrant of the breast toward the axilla. The skin over the breast is somewhat reddened, and the reddened place is hard to the touch, flattened, and somewhat elevated. Underneath this spot a distinct, somewhat irregular mass can be felt, filling the greater part of the affected quadrant. The skin is not broken. In the axilla can be felt a chain of glands extending from the margin of the breast as far as the finger can reach. Nothing abnormal can be felt above the clavicle. The heart and lungs are normal. Urine, specific gravity 1010; slightly acid; no albumen; no sugar. Examina-

tion of the abdomen shows no ascites, no tumor, no evidence of metastases. There is no swelling of the arm or hand.

Discuss in this case the diagnosis, the treatment, and the prognosis.

CASE 3. — A man, aged 29, by occupation a laborer, two months ago fell ten feet and struck on his left shoulder. The fall was followed by great pain in the shoulder, with swelling. The swelling extended down the entire arm. The swelling gradually disappeared, and at the end of three or four weeks he began to use his arm.

There is now no pain; but the shoulder feels stiff, and the motion of it is limited. The pain in the beginning was chiefly in the shoulder, but it extended down the arm. It did not correspond with the course of any special nerves.

The family history is negative.

Physical Examination. Heart and lungs are negative. The arm cannot be raised to a horizontal position; nor can the hand be placed upon the head or upon the opposite shoulder. The patient can push and pull with considerable force. Under the left acromion there is a depression, — not only a flattening of the deltoid, but a distinct depression. The elbow cannot be brought to the side. On rotation of the humerus the head of the bone cannot be felt in the glenoid cavity or in the axilla, but rather toward and under the coracoid process. The urine is negative.

What is the diagnosis, the treatment, and the prognosis?

ORTHOPEDIC SURGERY. — Professor BRADFORD.

1. Mention five of the most important symptoms in the early stage of caries of the spine, fifth to eighth dorsal vertebrae.
2. How is a diagnosis made in early hip disease?
3. Describe knock knee and give the cause.
4. Describe the deformities in the late stage of tumor albus.
5. Describe the appearances in a light case of lateral curvature.
6. Describe congenital torticollis.
7. Give the symptoms of flat foot.
8. Describe a leg afflicted with infantile paralysis.
9. What are the essential principles of the local treatment of osteoarthritis?
10. Describe the characteristics of two of the types of the non-tubercular joint diseases.

SYPHILIS. — Dr. POST.

1. What is syphilis?
2. Describe the so-called *mucous patches* of the skin.
3. Describe the common lesions of the palms.
4. Describe the gross characteristics of the more common affections of the bones.
5. What do you understand by the therapeutic test and what is its value?

OPHTHALMOLOGY.—Asst. Professor STANDISH.

1. Iritis. Etiology, clinical history and treatment.
2. Name the common mydriatics and myotics.
3. Describe the field of vision in (1) glaucoma, (2) tobacco amblyopia.
4. Senile cataract. Clinical history and methods of diagnosis.
5. Give a history and description of ocular headaches such as would be related by a man 30 years of age who had never worn any correction for his refractive errors.

OTOLOGY.—Professors BLAKE and J. O. GREEN.

1. Give the location of the mastoid antrum. How would you reach it in performing the simple mastoid operation?
2. What is the relation of
 - (a) the lateral sinus to the mastoid?
 - (b) the facial nerve to the antrum?
3. What is the effect, upon the Eustachian tube, of contraction of the levator and tensor palati muscles?
4. What is the effect, upon the hearing, of a paralysis of the stapedius muscle?
5. Give the pathology, only, of acute suppuration of the tympanum.
6. Give the treatment of chronic suppuration of the tympanum.
7. Describe the appearance of the drum-head in an otitis media acuta.
8. Give the treatment of an acute secretory catarrh of the middle-ear.

LARYNGOLOGY.—Dr. FARLOW.

1. What are the functions of the nose?
2. A child, 8 years old, pale and undersized, is brought to the physician on account of open mouth, especially at night. The nose is small, narrow, and turns down at the tip. The inferior turbinates are pale, large, and touch the floor of the nose and the septum. The middle turbinates are not easily seen, but are somewhat enlarged. The upper incisors project beyond the lower, the palate is narrow and rather high. The tonsils are about normal in size. The pharynx and naso-pharynx have a number of slightly enlarged, red follicles, and at the vault, as well as in the nose, there is considerable yellow secretion.

Discuss the nature of the conditions found and give the treatment.

3. Mr. A., 42 years of age, complains of frequent nosebleed from the left nostril, especially on blowing the nose. He says his general health is good enough. He smokes many cigarettes and drinks several cocktails a day.

The nasal septum deviates to the left, and there is a small, irregular spur which narrows the nostril to a certain extent. Just in front of the spur, on the cartilaginous septum, is a small erosion with a thin coating

of blood. The nasal mucous membrane in general is dry and dull red, and there is considerable tenacious mucous on the posterior pharyngeal wall.

Diagnosis and treatment.

4. What are the different ways of removing or diminishing the size of large or diseased tonsils? Under what conditions would you use each of these methods?

5. What laryngeal appearances would make you suspect laryngeal tuberculosis in an early stage? In later stages what appearances are nearly pathognomic? Diagram.

6. In attempted phonation, the vocal cords of Mrs. A. are seen to remain in abduction.

When Mrs. B. attempts to speak, the left cord remains nearly in the median line, in the same position in which it was in respiration. The right cord, from its position in abduction, crosses over the median line and touches the left cord.

What are the vocal symptoms in the two cases? What is the cause of the laryngeal appearances (1) in Mrs. A., (2) in Mrs. B.?

LEGAL MEDICINE. — Dr. E. W. DWIGHT.

1. What are the general principles of law as to the disposition, mutilation, and ownership of dead bodies?
2. How can one distinguish between gunshot and other wounds?
3. Describe the most common forms of dynamic asphyxia.
4. What are the most common causes of natural death in the newborn?
5. When would a practitioner of medicine be held guilty of malpractice?

HYGIENE. — Asst. Professor HARRINGTON.

1. Causes, effects, and prevention of bacterial richness of milk.
2. Relation of over-crowding to tuberculosis. How is the disease believed to be transmitted in confined spaces? How can the probable truth of the theory be demonstrated?
3. What are the supposed causes of the apparently irreducible minimum of typhoid fever incidence in communities that are supplied with pure water? Possibility of transmission by ice.
4. What is meant by "natural increase" and "actual increase" in population? To what causes is the progressive decrease in the native birth-rate ascribed? How are birth-rates, marriage-rates, and death-rates calculated?
5. Compare the disinfectant properties of carbolic acid 1:40, creolin 1:20, corrosive sublimate 1:1000, and saturated solution of potassium permanganate.
6. State the approximate value in calories of a kilogram of average cheese; milk; potatoes; cane sugar.

Electives.

ANATOMY. — Dr. WARREN.

Describe briefly the structures and their relations found in the dissection of:—

1. The axilla. -
2. The ischio-rectal fossa.
3. The popliteal space.

CLINICAL MICROSCOPY. — Dr. WHITNEY.

1. Describe the structure of cancers. Illustrate by the different types found in the breast.
2. Changes in the uterus during pregnancy, that can be recognized microscopically.
3. The differential diagnosis between cysts of the ovary and broad ligament.
4. Diagnosis of a specimen.

OPERATIVE SURGERY. — Professor M. H. RICHARDSON.

1. Ligature of the common carotid artery.
2. Intestinal suture.
3. Removal of the breast and axillary contents.
4. Excision of the elbow.
5. Operation for strangulated inguinal hernia in the male.
6. How would you incise the abdominal wall in operations on
 - (a) the gall-bladder;
 - (b) the appendix;
 - (c) the middle pelvis?

ORTHOPEDIC SURGERY. — Professor BRADFORD.

1. Give the characteristic symptoms in caries of the spine.
2. Give the prognosis of caries of the spine with and without treatment.
3. Describe the apparatus used in the treatment of caries of the spine in the lumbar, mid dorsal, and cervical regions.
4. Describe the operations used in congenital club foot.
5. What is the prognosis and treatment in club foot?
6. Describe the method of operation in knock knee and bow legs.
7. Describe the apparatus used in bow legs and knock knee.
8. Describe the apparatus used in the treatment of the different stages of hip disease.
9. What operative measures are to be used in tuberculosis of the knee?
10. Describe the methods of treatment, both operative and non-operative, to be used in the treatment of cerebral and spinal paralysis.

OPERATIVE OBSTETRICS. — Asst. Professor C. M. GREEN.

1. In all low forceps work, why is the left blade applied first?
What is the general rule as to the direction of forceps traction, wherever the head may be in the pelvis?
At what period in the delivery should the forceps be removed?
What precaution is necessary in removing the forceps?
2. In performing internal podalic version, when is the preferable time to rupture the membranes? Which foot should be brought down? Why is it better not to bring down both feet?
In the manual extraction of a breech, when should the back of the foetus be turned to the pubic arch? When should the arms be delivered? What is the technique of bringing down the arms? What precautions must be exercised?
3. A primipara, seen early in labor, is found to have the following pelvic measurements: inter-spinous, 23 cm.; inter-cristal, 25 cm.; external conjugate, 18 cm. The head presents, O.L.A., and is not engaged. The foetus is estimated to weigh eight pounds. After two hours of second-stage labor, the head is found to be engaged, well flexed, in the superior strait, the os uteri fully dilatable, the membranes unruptured, the foetal heart sounds normal; the woman is becoming tired, but is in fairly good condition. Describe your treatment from this time, and outline any operation you may perform.
4. A quadrigravida, seen ten days before the expected date of labor, has the following history: her first child was lost in a difficult high forceps delivery; her second, in a breech extraction; the third child was successfully delivered by induced labor at seven and a half months, but lived only a few days. Pelvimetry shows a justo-minor pelvis with a true conjugate at the brim of 3.2 inches; the foetus is estimated to weigh eight pounds; the parents are desirous of having a living child. Discuss your treatment of the case, and outline any operation you may perform.

GYNAECOLOGY. — Asst. Professor C. M. GREEN.

(As far as possible, illustrate your work with diagrams.)

1. Describe an approved operation for the repair of a perineum ruptured through the sphincter ani, and give the post-operative treatment.
2. In an operation for the closure of a vesico-vaginal fistula,
 - (a) What is the most satisfactory position of the patient?
 - (b) Describe the denudation.
 - (c) What is the best suture material?
 - (d) At what distance from each other should the sutures be placed?
 - (e) What means should be adopted during convalescence to prevent undue tension on the sutures?
3. When there is considerable venous oozing from the broad ligament and pelpic peritoneum after the separation of adhesions in the removal of a tubo-ovarian mass, how would you proceed?
4. When there is no occasion for haste, what should be the general and local preparation of a patient for an abdominal operation?

5. In the operation of supra-vaginal hysterectomy with removal of the appendages, what vessels is it necessary to ligature? How would you seek to avoid ligature of the ureter? Describe the peritoneal toilet after this operation.

DERMATOLOGY.—Dr. WHITE.

1. A little child is brought to the hospital by a mother who speaks only Armenian. The child is two years old and has on her left arm an area of brilliant erythema, extending up and down for about three inches from the bend of the elbow. The upper border of the pinkish surface is irregular in shape, while the lower is as straight as though outlined by a ruler. Everywhere the line of demarcation between healthy and abnormal skin is very sharply drawn. In the centre of this affected region are two large bullae which have the diameters of hens' eggs, rise abruptly from the skin and are filled with turbulent serum.

What is the diagnosis and what is the treatment?

2. Give as fully as possible the clinical appearances of vitiligo and the treatment of an extensively distributed case.

3. A young man, perhaps twenty-five years of age, consults a physician on account of the cutaneous changes in his nose. He says that three months ago he noticed that his nose bled frequently and became so stopped up that he had difficulty in breathing. For these symptoms he received treatment from a local physician.

A few weeks afterwards, the patient found two "pimples" on his nose, one near the tip and the other on one of the alae. These lesions apparently grew in extent, but the man does not know whether others developed or whether the whole process extended from these original "pimples."

At present the whole cartilaginous part of the nose, from one side of the cheek to the other, and from the junction of the septum nasi and the lip up to the boundary on the bridge between cartilage and bone, is uniformly affected. The color is dark red. The nose is slightly enlarged, the skin rather elastic, tense and oedematous—not hard and not soft. The surface is covered with fine, rather adherent and scattered elements which resemble scales rather than crusts; but it would be difficult to say which were really present. The outline of the diseased tissue is fairly sharply defined, but contains no isolated lesions and is quite uniform. However, near the border on the right ala there is a very soft spot, yellow in hue than the adjacent tissue and about the size of a pea. In one other part of the diseased area there is a suggestion of a similar nodule. These lesions seem to be deeply seated and do not rise much above the level of the skin. There is no ulceration anywhere.

Give as full a differential diagnosis as possible and discuss the various methods of treatment.

4. Write a good description of the clinical appearances of dermatitis herpetiformis.

5. A young man, who travels about a good deal, shows a rather general eruption on his body and complains a great deal of the itching accompanying this outbreak.

The eruption has been present for about six weeks and consists of fine papules, excoriated [and often capped by a tiny bloody crust] and scat-

tered discretely over the trunk, and to a lesser extent on the fronts of the upper arms and thighs. On the top of the glans penis there is a very superficial ulceration with crusting periphery, but no inguinal glands are to be felt. Between the fingers there are one or two small pustules.

State fully the differential diagnosis and give a detailed description of the treatment.

NEUROLOGY. — Dr. WALTON.

1. How does syphilis attack the nervous system?
2. Varieties of headache and their pathogenesis?
3. Epilepsy — diagnosis (mentioning characteristic symptoms in order of importance) and treatment.
4. Diagnosis, prognosis, and treatment of anterior poliomyelitis.
5. Discuss the symptoms, give the differential diagnosis, prognosis, and treatment of the following case: —

A man of thirty-five has an ataxic gait characteristic of tabes, and has loss of muscle sense with slight impairment of pain, touch and temperature senses in both feet, not limited to the distribution of any nerve or of any spinal segment. He states that the onset of these symptoms was gradual, beginning about $1\frac{1}{2}$ years ago, that one year ago he was confined to bed for 13 weeks with weakness, frequent vomiting, headache, and epigastric pain. At that time there were also sharp pains in the legs, varying in location and followed by soreness. These symptoms had come on gradually during the preceding months. Since getting up he first had ataxia and numbness and has neither become better nor worse. He has had no recurrence of vomiting and headache and the pains have practically disappeared.

Examination to-day shows absence of the knee-jerk and Achilles reflex, normal pupils and fundus oculi. There has been no bladder disturbance at any time. He denies venereal history. He chewed constantly and smoked frequently prior to going to bed, but had left off the chewing shortly before. He formerly drank, he states moderately, but during his stay in bed he sometimes would drink a pint of whiskey in the day. He now uses no alcohol, but smokes several cigars a day.

OPHTHALMOLOGY. — Asst. Professor STANDISH.

1. Describe the variations in the pigmentation of the normal fundus oculi.
2. A boy, fifteen years of age, has two dioptics of hypermetropia.
 - (a) How would you determine and record the acuity of vision?
 - (b) What would probably be his vision for distance without a correcting lens? Give reasons.
 - (c) In a retinoscopic examination of his eyes with a plane mirror at the distance of one meter what would be the phenomena observed?
3. Give a differential diagnosis between acute catarrhal conjunctivitis, glaucoma, and iritis.
4. Describe the common operations for the extraction of senile cataract.
5. Give the clinical history, diagnosis, and treatment of a case of sympathetic ophthalmitis.

OTOLOGY.—Professors BLAKE and J. O. GREEN.

1. Describe the drum-membrane
2. Give the indications for removal of the ossicles.
3. What is the effect upon the hearing, in the normal ear, of voluntary contraction of the tensor tympani muscle.
4. Why does the act of swallowing favor inflation of the middle ear by means of the Politzer air bag.
5. Give the differential diagnosis of acute suppuration of the tympanum from acute secretory catarrh of the tympanum.
6. Give the pathology and treatment, in full, of acute suppuration of the tympanum, without complications.
7. In what portion of the drum-head is a rupture, from concussion, most likely to occur, and why?
8. What is the so-called Menieres disease and what are its symptoms?

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WESBY

